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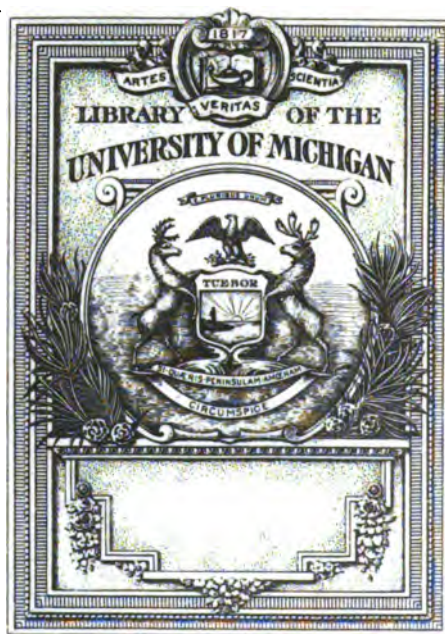
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FIFTH ANNUAL REPORT

OF THE

Chief State Inspector

OF

Workshops and Factories.

With Compliments of

HENRY DORN,

Chief State Inspector of Workshops and Factories,

COLUMBUS, OHIO.

Factor.

Recipients of the Report are respectfully requested to acknowledge the same.

Editors of Newspapers and Periodicals, Officers of Departments, Institutions or Societies, publishing official reports, which may be of use to this department, will confer a favor by forwarding exchanges.

COLUMBUS:

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OFFICE CHIEF STATE INSPECTOR OF WORKSHOPS AND FACTORIES,
COLUMBUS, OHIO, *November 15, 1888.*

To His Excellency, JOSEPH B. FORAKER, Governor of Ohio:

SIR: I have the honor to herewith submit to the General Assembly, through you, the Fifth Annual Report of the Chief State Inspector of Workshops and Factories.

Very respectfully, yours,

HENRY DORN, *Chief.*

FIFTH ANNUAL REPORT.

INTRODUCTORY.

In submitting this my fifth annual report, as Chief Inspector of Workshops and Factories, an idea suggests itself to my mind, to give, for the benefit of those interested, a full history of the department from the day of its creation to the present time.

FIRST YEAR.

AN ACT.

To supplement section 2573 of the Revised Statutes of Ohio, for the better protection of the health comfort and safety of persons employed in shops and factories.

SECTION 1. *Be it enacted by the General Assembly of the State of Ohio*, That section 2573 of the Revised Statutes of Ohio, as amended April 19, 1883, be and the same is hereby supplemented with sectional numberings as hereafter provided.

Section 2573a. The governor of the state shall appoint a suitable person, to be known as the inspector of the sanitary condition, comfort and safety of shops and factories, who shall be a competent and practical mechanic in practice, whose duty it shall be to visit all factories and shops where ten or more persons are employed, and to carefully inspect the sanitary condition of the same, to examine the system of sewerage in connection with said shops and factories, the situation and condition of water-closets or urinals, in and about such shops and factories, and also the system of heating, lighting and ventilating all rooms in such factories and shops where persons are employed at daily labor, and also as to the means of exit from such places in case of fire or other disaster, and also all belting, shafting, gearing, elevators, drums and machinery of every kind and description in and about such factories and shops, and see that the same are not located so as to be dangerous to employes when engaged in their ordinary duties, and that the same, so far as practicable, are securely guarded, and that every vat, pan or structure filled with molten metal or hot liquid, shall be surrounded with proper safeguards for preventing accident or injury to those employed at or near them.

Section 2573b. That said inspector shall have entry into all such shops and factories at any reasonable time, and it shall be unlawful for the proprietors, agents or servants in such factories or shops to prevent, at reasonable hours, his entry into such shops and factories for the purpose of such inspection.

Section 2573c. That said inspector, if he finds upon such inspection, that the heating, lighting, ventilation or sanitary arrangement of any such shop or factory is such as to be injurious to the health of persons employed therein, or that the means of egress in case of fire or other disaster is not sufficient, or that the belting, shafting, gearing, elevators, drums and machinery in such shops and factories are located so as to be dangerous to employes, and not sufficiently guarded, or that the vats, pans or structures filled with molten metal or hot liquid are not surrounded with proper safeguards for preventing accident or injury to those employed at or near them, shall notify the proprietors or agents

of such factory or shop to make the alterations or additions necessary within thirty days, and if such alterations or additions are not made within thirty days from the date of such notice, or within such time as such alterations can be made with proper diligence upon the part of said proprietors, said proprietors or agents shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not more than two hundred and not less than ten dollars, which fine shall be paid into the treasury of the county in which such conviction is had.

The department was created April 4, 1884, and on the 14th of the same month I took the oath of office and entered upon the discharge of my duties.

The workings of factory inspection was entirely new in our State, and therefore required great study on the part of the inspector to execute the law justly and successfully, and carry out its intent. Though some idea of what the position required had been formed, there has been a development of responsibilities and an increased amount of work in the line of duties connected with factory inspection far beyond my expectation, and a field of usefulness opened up which has taxed the energies of the department to its utmost, and is now demanding more time and attention than the Chief and three assistants can possibly bestow.

When inspection first began on the 14th of April, 1884, a limited number of memorandum books were provided, in which to enter the condition of the factory, the number of employes, description of building, and the necessary changes ordered. Many obstacles were thrown in the way of the inspector, as the provisions of the new law were not generally known by manufacturers, and a great deal of time was taken up in its explanation. To remedy this the following circular was printed and forwarded to manufacturers, a copy of which was also addressed to the newspapers of the cities and towns of the State requesting its publication :

STATE OF OHIO, OFFICE OF INSPECTOR OF SHOPS AND FACTORIES,

CLEVELAND, 1884.

Enclosed you will find a copy of the law enacted at the late session of the General Assembly, providing for the appointing of an Inspector of Shops and Factories, and prescribing his duties. The law also makes it the duty of the owners or managers of all shops and factories employing ten or more persons, to place and keep such shops or factories in good sanitary condition, and to erect and keep in repair all the necessary safeguards on and about machinery, elevators, etc., calculated to render the persons of employes free from accidents or injuries.

The undersigned having been appointed by the Governor of the State as Inspector under said law, respectfully urges upon the owners or managers of all shops coming under the provisions of the law, to take immediate action looking to a compliance with its requirements.

As rapidly as possible the Inspector will visit the different localities, and where, in his opinion, danger to life or health of employes may be avoided, will point out the remedy, and urge its adoption.

Action by the State Inspector can be avoided by the owners and manufacturers

placing their shops or factories in proper condition; due and proper allowance will be made for existing conditions, but nevertheless the law will be enforced.

HENRY DORN,
State Inspector.

The issuing of the above circular had the desired effect, as a large number of manufacturers throughout the State made changes and alterations in their respective establishments prior to the visit of the inspector.

The first annual report contained the work of six months' inspection only; 487 establishments were inspected in different sections of the State, and the first annual report was promptly issued. Many recommendations were made to the Legislature, showing the great needs of factory inspection, and a number of letters were addressed to leading manufacturers of the State, asking their opinion regarding the inspection law, and I was pleased to note that answers were received encouraging the inspector in his new field of labor.

One of the many recommendations made was to so change the law as to give the inspector three assistants, and, through the wise action of the members of the 66th General Assembly the law was changed, and the following act passed April 29, 1885:

AN ACT.

SECTION 1. *Be it enacted by the General Assembly of the State of Ohio*, That sections 2573a, 2573b, 2573c, supplementary to section 2573 of the Revised Statutes of Ohio, passed April 4, 1884, be so amended as to read as follows:

Section 2573a. For the purpose of facilitating an efficient and thorough inspection of workshops and factories throughout the state of Ohio, and to provide an adequate inspecting force therefor, the state is hereby divided into three inspection districts, as follows:

The counties of Cuyahoga, Lake, Geauga, Ashtabula, Trumbull, Portage, Summit, Medina, Lorain, Wayne, Stark, Mahoning, Columbiana, Holmes, Tuscarawas, Carroll, Jefferson, Harrison, Coshocton, Belmont, Ashland, Richland, Huron, Erie, Crawford, Seneca, Sandusky, Ottawa, Lucas, Wood, Henry, Fulton, Defiance, Williams, Wyandot, Hancock, Putnam and Paulding, shall compose the first district.

The counties of Franklin, Delaware, Morrow, Marion, Knox, Union, Madison, Fayette, Pickaway, Ross, Pike, Scioto, Licking, Muskingum, Guernsey, Noble, Monroe, Washington, Morgan, Perry, Fairfield, Hocking, Athens, Vinton, Meigs, Jackson, Gallia and Lawrence, shall compose the second district.

The counties of Hamilton, Clermont, Brown, Adams, Highland, Clinton, Warren, Butler, Greene, Clarke, Montgomery, Preble, Miami, Champaign, Darke, Logan, Shelby, Mercer, Hardin, Allen, Auglaize and Van Wert, shall compose the third district.

SEC. 2. The governor shall appoint one chief inspector, by and with the advice and consent of the senate, who, with the approval of the governor, shall appoint three district inspectors. The chief inspector and district inspectors shall be competent and practical mechanics. The chief inspector shall hold his office for the term of four years, and shall have his office in the state house, where shall be kept the records of his office, and the district inspectors shall hold their office for the term of three years, from the first day of May after their respective appointments, and until their successors are appointed and qualified; the first appointments hereunder shall be made within thirty days from the passage of this act; in case of the resignation, removal or death of the chief inspector,

the vacancy shall be filled in the manner above provided for original appointments for the unexpired term only, of the position so made vacant.

SEC. 3. The chief inspector and district inspectors shall give their whole time and attention to the duties of their offices respectively; it shall be their duty to visit all shops and factories in their respective districts as often as possible, to see that all the provisions and requirements of this act are strictly observed and carried out; they shall carefully inspect the sanitary condition of the same, and it shall be their duty to examine the system of sewerage in connection with said shops and factories, the situations and conditions of water-closets or urinals in and about such shops and factories, and also the system of heating, lighting and ventilating all rooms in such shops and factories where persons are employed at daily labor; also as to the means of exit from all such places in case of fire or other disaster, and also all belting, shafting, gearing, elevators, drums and machinery of every kind and description in and about such shops and factories, and see that the same are not located so as to be dangerous to employes when engaged in their ordinary duties, and that the same, so far as practicable, are securely guarded, and that every vat, pan or structure filled with molten metal or hot liquid shall be surrounded with proper safeguards for preventing accident or injury to those employed at or near them; and that all such are in proper sanitary condition, and are adequately provided with means of escape in case of fire or other disaster.

Section 2573b. That said inspectors shall have entry into all such shops or factories at all reasonable times, and it shall be unlawful for the owner, proprietors, agents or servants in such factories or shops to prevent, at all reasonable hours, their entry into such shops or factories, for the purpose of such inspections.

Section 2573c. That said inspectors, if they find upon such inspection that the heating, lighting, ventilation or sanitary arrangement of any such shop or factory is such as to be injurious to the health of persons employed or residing therein, or that the means of egress in case of fire or other disaster is not sufficient, or that the belting, shafting, gearing, elevators, drums and machinery in such shops and factories are located so as to be dangerous to employes, and not sufficiently guarded, or that the vats, pans or structures, filled with molten metal or hot liquid, are not surrounded with proper safeguards for preventing accident or injury to those employed at or near them, shall notify the owners, proprietors or agents of such shops or factories to make the alterations or additions necessary within thirty (30) days, and if such alterations or additions are not made within thirty (30) days from the date of such notice, or within such time as said alterations can be made with proper diligence upon the part of said proprietors and owners, said proprietors, owner or agent so notified shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined not more than two hundred (200) and not less than ten (10) dollars, which fine shall be paid into the treasury of the county in which conviction is had.

SEC. 4. The district inspectors shall make a record of all examinations of shops and factories in their respective districts, showing the date when made, the condition in which such shops and factories are found, and what changes were ordered, the number of shops and factories in their respective districts, the number of men, women and children employed in each shop and factory, together with all such other facts and information of public interest concerning the condition of such shops and factories as they may think useful and proper, which record shall be filed in the office of the chief inspector every week, to be by him recorded, and so much thereof as may be of public interest, to be included in his annual report.

SEC. 5. The chief inspector shall issue such instructions, make such rules and regulations for the government of the district inspectors, not inconsistent with the powers and duties vested in them by law, as shall secure uniformity of action and proceedings throughout the different districts.

SECOND YEAR.

The experience gained during the first year of my service as Inspector of Workshops and Factories plainly pointed out the great necessity of *system* in the discharge of the multifarious duties connected with the department, and therefore the District Inspectors were provided with blank books in which to note their work in order that it might be more accurately performed, and that the provisions of the following laws regulating the employment of minors in workshops and factories and in relation to seats for females in manufacturing, mechanical and mercantile establishments could be properly enforced :

AN ACT.

SECTION 1. *Be it enacted by the General Assembly of the State of Ohio*, That section 6986 of the Revised Statutes of Ohio be amended and supplemented so as to read as follows, with sectional numberings 6986, 6986aa, 6986bb, and 6986c:

Section 6986. That no minor under the age of twelve years shall be employed in any factory, workshop or establishment wherein the manufacture of any goods of any kind is carried on.

Section 6986aa. No minor under the age of eighteen years shall be employed in any of the places named for a longer period than ten hours a day, and in no case shall the hours of labor exceed sixty in one week ; and every employer shall post, in a conspicuous place in every room, where such persons are employed, a printed notice, stating the number of hours required of them in each day of the week.

Section 6986bb. Any person or corporation, who shall employ any person contrary to the provisions of this act, or who shall violate any of the provisions of this act, shall, upon conviction thereof, be fined in any sum not less than fifty nor more than one hundred dollars, or imprisoned not less than thirty nor more than ninety days.

Section 6986c. It shall be the duty of the inspector of shops and factories to prosecute all violations of this act, when the same shall come to his knowledge, in any court of competent jurisdiction. All fines collected under this act shall inure to the benefit of the school fund of the district where the offense was committed.

AN ACT.

SECTION 1. *Be it enacted by the General Assembly of the State of Ohio*, That every person or corporation employing female employes in any manufacturing, mechanical or mercantile establishment in this state shall provide suitable seats for the use of the female employes so employed, and shall permit the use of such by them when they are not necessarily engaged in the active duties for which they are employed.

SEC. 2. Any person or corporation violating any of the provisions of this act shall be punished by a fine of not less than ten dollars nor more than twenty-five dollars for each offense.

The blank books contained the following printed questions :

Date of inspection
 Name
 Location
 City or town
 County
 Shop or factory owned by
 Description of buildings, frame, stories ;
 of brick, stories ;

Goods manufactured
 Party to be notified
 Number employed
 Number employed between 12 and 18 years
 Number employed under 12 years
 Hours of labor required of minors
 Notices are not posted in each room to that effect.
 Seats are not provided for all the women employed.
 Belting, shafting, gearing, vats, pans, fairly, not well, guarded.
 Large belts are not provided with shifters.
 Number of elevators
 Kind of safety device used
 Openings on each floor, protected by self-closing gates, bars or trap-doors.
 Means of egress and escape
 Number of stairways, inside outside.
 Fire-escapes, balcony inclined ladder straight ladder
 endless chains
 Other means
 Means for extinguishing fire, stand-pipes, hose, pumps, automatic sprinklers, fire extinguishers, buckets or barrels of water.
 Doors open out, in or both ways.
 Number of water-closets, inside, outside,
 Ventilation, good, fair, bad.
 Shop in first class, good, fair, bad condition.

These books have proven to be of great value; they keep the inspectors thoroughly posted as to their duties, containing all the questions to be propounded to owners of establishments to be inspected, and save time which would otherwise be consumed without them.

To save time often taken up in explaining the law to the manufacturers of the State, the District Inspectors were furnished with circulars containing all laws relating to the inspection department, with instruction to leave a copy in each establishment visited. They were also provided with letter-heads, in order that changes recommended by them might be written thereon, and the manufacturer served with a copy thereof.

The following is a copy of the letter-head :

STATE OF OHIO,
 OFFICE OF CHIEF INSPECTOR OF WORKSHOPS AND FACTORIES,
 COLUMBUS, 188.....

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As required by the act of the General Assembly of the State of Ohio, entitled "An act to apportion the State of Ohio into inspection districts, to provide for adequate and efficient inspection of workshops and factories, and to provide better protection for the health, comfort and safety of persons employed therein or living therein," passed April 29, 1885, and "An act amendatory and supplementary to section 6986 of the Revised Statutes of Ohio, relating to the employment of minors in workshops and factories," passed April 27, 1885, I made an examination of your establishment, and suggest that

the changes mentioned below are necessary, in my opinion, in order to meet the requirements of the acts referred to above.

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Inspector of Workshops and Factories.

Approved

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Chief Inspector.

After the most destructive fire that was ever witnessed in the city of Cincinnati, which occurred May 21, 1885, by which sixteen lives were lost, the following circular was issued to all the mayors in the cities and towns of the State, which had a tendency to lessen the work of the department:

STATE OF OHIO,

OFFICE OF CHIEF INSPECTOR OF WORKSHOPS AND FACTORIES, COLUMBUS.

DEAR SIR: The necessity of a thorough inspection of buildings, with a view of guarding against loss of life from defective construction, and in case of fire, is so apparent that it is now questioned by no one. The late deplorable calamity in Cincinnati, by which sixteen lives were lost, would not have occurred, had that *death-trap* been subjected to a "careful" inspection, and the occupants of said building notified of the fact that the building was defective, as there were no means "whatsoever" for escape, in case of fire.

By sections 2574 and 2575 of the Revised Statutes, amended April 19, 1883 (80 Ohio Laws, 188), you are clothed with certain authority in this direction; and it has occurred to me that if there could be co-operation between us, in seeing that all buildings are made safe and provided with the proper means of exit in case of fire, the results would be more satisfactory to all concerned. Many lives could be thus saved that are now sacrificed to "greed" and "carelessness," and hundreds that are annually rendered helpless cripples, and thrown for support upon the charity of their friends or that of the public, would be preserved to usefulness and their families.

Your city will be visited either by myself or one of my assistants as soon as our duties will permit. In the meantime, if you have any suggestions to make, I should be very glad to hear from you.

I remain, most respectfully, yours,

HENRY DORN, *Chief.*

The system adopted in this department in regard to the condition of establishments in the State, is, without a doubt, second to none in any other department of the kind in the United States. The District Inspectors are compelled to send in a report of the work performed by them every week, on blanks that are furnished, containing the same questions as are printed in the blank books. The reports are recorded in books especially

adopted for that purpose, and are, after being carefully marked, placed in file-boxes and properly labeled; each inspection district being provided with twelve boxes, one for each month in the year. In this way all changes ordered in an establishment can be traced back to the first day of inspection after the department was created. All changes ordered by District Inspectors are copied on presses furnished them for that purpose, thus enabling the inspector to refer to his copy-book on paying a second visit to an establishment. Plans of buildings are also required where fire-escapes are ordered.

The second year 1,469 establishments were inspected, and the second annual report was issued, and the following recommendations made to the General Assembly:

1. To transfer District Inspectors from one to another district, whenever such transfer may be either beneficial or necessary.
2. Appropriation for clerk hire.
3. Requiring employers to send names of injured persons in their employ to the office of the Chief Inspector.
4. Fire-escapes to be approved by the inspectors.
5. Compelling the owners of buildings to provide them with fire-escapes.
6. Elevators to be provided with automatic gates.
7. Appointing of a commission of experts in each county, to which plans of buildings must be submitted for their approval.
8. Giving inspectors power to have buildings taken down, if found in dangerous condition.
9. Changing the law (providing seats for females), so that they can use the same in manufacturing establishments.
10. Employers to be required to prove the age of children in their employ.
11. To include mercantile houses, and houses where goods are sold, in the act where minors under the age of twelve years are employed.

THIRD YEAR.

The third year of the existence of the department gave evidence of appreciation and satisfaction by the employer as well as the employed. Each inspector was treated with the utmost courtesy, and all changes recommended in establishments, with a few exceptions, were complied with, proprietors being not only willing, but anxious to yield obedience to the law in every respect and thereby protect the lives and health of those in their employ.

The importance, yea, the necessity, of a thorough inspection of all workshops and factories where persons are employed at daily labor, no matter what the nature of the work may be, must be apparent to every one who has given the subject the least consideration. Who will claim that there is anything more deserving the careful attention and consideration of the General Assembly than the protection of the lives and health

of the people on whom the State depends for its wealth and prosperity? Should not this subject be of as *great importance*, or even greater, than any other coming before the Legislature?

The matter of Boiler Explosions, Slide Valves, Fire-escapes, Shafting and Pulleys, Emery-wheels and Grindstones, Fencing in of Fly-wheels, Buzz and Band Saws, Elevators, Guarding Machinery in General, Ventilation and Heating, Locking of Doors, Automatic Sprinklers, Seats for Female Employes, and last, but not least, Child Labor, have been thoroughly discussed and recommendations made, but I regret to say, they were not given the consideration merited, nor were they generally adopted by the Legislature. Of the recommendations made in my second annual report, only two items were adopted:

First: To transfer district inspectors from one to another district, whenever such transfer was found to be either beneficial or necessary.

Second: Appropriation for clerk hire.

The sum of \$250.00 was appropriated for that purpose; though small, it was a great aid to the inspector at that time. Without a clerk the chief would have been confined to the office, and duties of an important nature unavoidably neglected.

In the year 1886, the idea of the formation of a National Association of State Inspectors of Workshops and Factories was conceived by your humble servant, and I am pleased to say that the object was accomplished by the calling of a convention which met in Philadelphia in June of the following year, in reference to the formation of which the Chief Inspector of New Jersey, Hon. L. T. Fell, in the Prefatory of the first report of the Convention, says:

"I believe that I but voice the sentiment of all my associates in that Convention, when I say that Hon. Henry Dorn, Chief Inspector of Workshops and Factories of Ohio, is deserving of all praise for his untiring efforts in bringing us together, and for the wisdom, born of experience, he exhibited in our deliberations, showing as he so clearly did, a complete mastery of the entire subject."

The work of the third year was the inspection of 3,107 factories and the issuing of the third annual report.

FOURTH YEAR.

The fourth year of the department was crowned with success, as both employer and employe had learned from former inspections that they were more and more benefited every year by the laws governing the same. In that report many important questions for the general good of the people were explained at length, and a number of recommendations made to the members of the 67th General Assembly.

The question of Boilers and their Dangers, Unjustifiable Complaints, Annealing and Tempering Fine Tools, Self-imposed Danger, Child-labor, Danger of Fire Caused by Steam Pipes and Hot-air Flues, The Minors' Law, Dust and Shaving Chutes, Thought and Facts, Official and Unofficial, Spontaneous Combustion, Improvements in Workshops and Factories, Dangers of Fire Arising from Faulty Chimney Construction, Lead Poisoning, Reporting of Accidents, National Convention of Factory Inspectors, Traveling Expenses, How Inspection is Received by the People, Too Much Care no Care at All, Crude Rock-oil for Keeping Steam Boilers Clean, Slipping of Leather Belts, Fire-escapes, Clerical Expense, etc., etc., all have been thoroughly dealt with, and the manufacturers and operators of the State and the people generally have been benefited by the report.

The recommendation in regard to the employment of minors in workshops and factories was amended by the 67th General Assembly, and now reads as follows:

AN ACT.

SECTION 1. *Be it enacted by the General Assembly of the State of Ohio, That supplementary section 6986aa of section 6986, as amended April 27, 1885 (O. L. 82, p. 161), be so amended as to read as follows:*

Section 6986aa. No minor under the age of eighteen years shall be employed in any of the places named for a longer period than ten hours a day, and in no case shall the hours of labor exceed sixty in one week; and every employer shall post in a conspicuous place, in every room where such persons are employed, a printed notice, stating the number of hours required of them in each day of the week; the form of such printed notice shall be furnished by the chief inspector of workshops and factories, and shall be approved by the attorney-general; and it shall also be the duty of every employer of minors to keep a record, which shall be open to the inspection of the chief inspector of workshops and factories and of his assistants, giving the name of each minor employed, his or her name, date and place of birth, and also present residence of the parents or guardians.

This was a step in the right direction, and is doing much good throughout the entire State. There has been no opposition manifested to the provisions of this law, except in a very few cases.

The recommendation to increase the salary of clerk was also approved, and the sum of eight hundred dollars appropriated for this purpose, which, although not sufficient for the ability that is required in this department, has, nevertheless, been of great benefit. The recommendation made to the Legislature each year since the creation of this department, relative to the power that should be vested in the inspector as to the erection of fire-escapes, has never been brought up. The subject is one well worthy of consideration, and should no longer be neglected. Under the law, almost anything in the shape of a fire-escape can be erected by manufacturers, owners or operators, no matter of how little avail or how unsafe. The inspector should be clothed with the power to approve of fire-escapes, and

that would put a stop to the erection of so many worthless and unavailable attachments to buildings called escapes.

During the fourth year there were inspected 3,581 factories, and the fourth annual report issued.

The four years of the existence of this department has plainly illustrated the fact that much good has been accomplished in the manufacturing establishments of the State, and the laws now in existence authorizing factory inspection generally approved of. The diminution of accidents in every part of the State is plainly visible, and the educational feature of the department alone is of more value than many times the amount appropriated for the maintenance of the office. Hundreds of poor, innocent, uneducated children have been taken out of workshops and factories, and sent to school, where they properly belong.

FIFTH YEAR.

In this, my fifth annual report, I have the pleasure of saying that the 68th General Assembly wisely adopted my former recommendation in enacting a law by which all manufacturers are compelled to report accidents occurring in their respective establishments, with the necessary particulars connected therewith, to this department. While manufacturers throughout the State are using every precaution to place proper safeguards around dangerous machinery and elevators in their establishments to prevent accident, yet, to avoid it at all times, is an impossibility. It is a law invaluable to the legislator, and has proven to be of great assistance to the Chief Inspector. It directs his attention to that class of workshops and factories where investigation is most needed. It has also had the effect to cause manufacturers to give more attention to the condition of their dangerous machinery and to look after the welfare of employes more frequently. It is much cheaper to expend a small sum of money for protection around dangerous places, than to pay a large sum to defray the expenses of lawsuits in case of prosecution for injury or death by accident. The law is a good one, and can be made more valuable, if sufficient appropriations are made for the factory inspection department.

Now, in closing the introductory of my fifth annual report, having given a full history of the department from its infancy, I can use no better language than that of Hon. Carroll D. Wright, Chief of the National Bureau of Labor Statistics, in so far as applicable to this department:

"I have often pointed out, in conversation with members of our legislature, as well as with manufacturers and the working classes in general, the dangers which may arise should the department become the object of political contest; that is, should it be considered by the State Government a place for ordinary political service. Nothing can be more detrimental to the permanent use for which the department so wisely had been established. Let it be granted, if you wish, that it has been created in accordance with

the demand of labor alone; let it be granted, if you wish, that it has been established for scientific purposes; or let it be granted that it has been created that employers may all learn the condition of the laboring classes, what has all this to do with the legitimate work committed to the inspector? It is the bounden duty of the inspector to see to it that nothing goes to the people that is not absolute truth, so far as it lies in his power to give the truth. In this, yea, in this alone, lies the key-note of the success of this department. Let the inspector devote himself to the faithful investigation of all conditions where facts should be known, and into all causes of bad conditions, of whatever nature, and fearlessly promulgate the results of his investigation. The popular education of the masses in the elementary facts of political and economic science, and in the principles of social science, is the greatest educational end of the day; but remember that to attempt to turn the functions of this department to base purposes is a crime not easily punished by law, but which can and will be punished by an unwritten law, which will reach us through a decree more to be dreaded than any merely judicial order or sentence; the sentence public opinion always passes upon the man who prostitutes the cause of humanity."

APPROPRIATIONS.

The appropriations for the factory inspection department are entirely inadequate, and the 68th General Assembly could do no wiser and better act than to follow the example of other States having factory inspection laws.

For instance, let us compare the appropriations of Ohio with those of Massachusetts:

Appropriations for Ohio in 1888.		Appropriations for Massachusetts in 1888.	
Salaries	\$4,483 01	Salaries	\$43,166 00
Traveling expenses	1,700 00	Traveling expenses	15,650 00
Contingent and incidental exp.	1,450 00	Contingent and incidental exp.	3,500 00
Total.....	\$7,633 01	Total.....	\$62,316 00

Thus it will be seen that the appropriations for the factory inspectors' department of Massachusetts amount to \$54,682.99 more than for Ohio.

The very meagre appropriation for traveling expenses for the District Inspectors compelled them to cease work shortly after the 15th of November, consequently nothing can be done in the direction of inspection until a partial appropriation of money is made by the Legislature, on the 15th of February.

No State excels, and very few equal Ohio in the munificence of her appropriations for the unfortunate insane, blind, deaf and dumb, and other deserving objects of charity. Will she be second to any other in her appropriations for the factory inspection department? As I said before, there is no department in the State Government more worthy of support from the legislative body than this. The safety of buildings, machinery of all kinds

and description, ventilation, sanitary condition, etc., etc., are not only looked after, but the most unfortunate of all, the innocent, helpless children, thousands of whom are compelled to labor before they can either read or write, or have the least opportunity for healthy recreation and innocent amusement, thereby destroying their future prospects by making unthinking and unfeeling machines of them. Is this not a worthy object for the members of the Legislature to look into? *Public opinion* demands that our legislators should pay the closest attention to the inspection department of the State; they should study the questions recommended from time to time by the Chief Inspector with the greatest care, and then they would very soon be convinced of the necessity of the department. *The future prosperity of our country depends, to a great extent, on inspection laws.* The appropriations should be increased from year to year, as the necessity demands, and the Chief Inspector would then be encouraged in his good work. No person should entertain the idea for one moment that the inspector has a bed of roses on which to sleep, or that his position is an enviable one. No officer of the State Government, either appointive or elective, has more arduous tasks or unpleasant and difficult duties to perform; and why should he not be furnished with the necessary means to perform well the duties imposed on him.

Many manufacturing establishments in the State could not be visited on account of the scanty appropriations made. Two of the District Inspectors were compelled to remain idle during the months of December, 1887, and January and a portion of February, 1888, as there was no money at the command of the department for traveling expenses; the Chief Inspector was compelled to draw on his own private resources for traveling expenses, to look after some of the most dangerous places in different sections of the State, as his traveling expenses had been, with the exception of the partial appropriation made by the Legislature in February last, completely cut off. Numerous written and verbal complaints from nearly every portion of the State reached this office during the year, asking of the Chief a personal investigation, but only a very limited number of them could be granted that request. As a result, this created an extra amount of office work, as all such matters require the closest attention, and the only way to accomplish this was through correspondence.

The second convention of the National Association of Factory Inspectors of North America was held at Boston, Mass., on the 8th to 10th of June, 1888, where the Chief Inspector was again compelled to draw on his private purse to defray his traveling expenses.

A convention of Boiler Inspectors was held at Pittsburgh, Pa., in November, and an invitation extended to Ohio's Chief Inspector to be present,

but this urgent and appreciative invitation, on account of not having the necessary funds to defray expenses, was reluctantly declined.

I sincerely hope that my appeal for sufficient means to carry out the objects for which this department was created, will not be treated with silence by your honorable body. It is also to be hoped that *henceforth* the legislators of Ohio will do all in their power in the direction of the enactment of wise and intelligent laws for the benefit of the working classes of our State, and that the obstructionists will see the futility of interfering with the progress of legislation which seeks only to enlighten the ignorant, and thus improve the quality of citizenship and the stability of the government.

INCREASE OF DISTRICT INSPECTORS.

As the work of the department increases every year, so the demand from all parts of the State for inspectors to make immediate visitations to investigate as to dangerous machinery, elevators, etc., increase in the same ratio. The present force of three District Inspectors has proven entirely insufficient to cover the territory assigned them. The first district is composed of thirty-eight counties, in which is located Cuyahoga county. This should alone have an inspector at all times. The second district consists of twenty-eight counties, which is entirely too large for one inspector to look after. The third district is composed of twenty-two counties, including Hamilton county. The city of Cincinnati contains more than one thousand shops and factories, making the field large enough for one inspector to properly take care of. Ohio, with an area of over 40,000 square miles, and containing more than twelve thousand shops and factories, should certainly be evidence enough for the increase in the number of inspectors in order that the work may be properly performed.

The State of New York has ten inspectors—one Chief, one Assistant Chief and eight Deputies, and is divided into eight districts, as follows :

- First district, four counties ;
- Second district, one county ;
- Third district, nine counties ;
- Fourth district, eleven counties ;
- Fifth district, ten counties ;
- Sixth district, nine counties ;
- Seventh district, eight counties ;
- Eighth district, eight counties.

As will be seen, the largest district in that State contains only eleven counties, and the smallest but one.

Under the present system, and with the small force employed in this

State, it is an utter impossibility to visit the factories even once a year. The condition of some factories demand that the inspector should make visits frequently, to insure the safety and health of those that are compelled to labor therein. I would therefore recommend that the law be so amended as to cause the appointment of three additional district inspectors, thus increasing the force to six, one of whom should be a practical boiler-maker, in order that all complaints in reference to the use of dangerous boilers in the manufactories of the State can be properly investigated.

My views in regard to boiler inspection will be found in another part of this report.

CLERICAL ASSISTANCE.

The amount of clerical work is, like all other duties connected with this department, increasing from day to day, and the Chief Inspector, with the assistance of one clerk, is unable, *even by working frequently late at night*, to transact the business of the office satisfactorily. Let it be said to the credit of the *present* clerk, that he has labored diligently at all times, for a sum entirely inadequate for the ability that is required of a clerk in the performance of the duties connected with this office. The sum of eight hundred dollars, appropriated by the Legislature last winter for clerk-hire is but a little over one-half the amount received by each one of the clerks in the other departments of the State Government; yet it can be proven that the amount of work performed by him exceeds that of any other clerk employed in the Capitol, and there is no reason why he should not receive a salary commensurate with his services. The qualifications of a clerk in the inspector's office does not alone require good penmanship; no, this is almost the least. A man is needed in the office who possesses not only sufficient educational and literary ability to carry on correspondence properly, but a mechanical knowledge as well, in order to pass judgment on matters of the utmost importance in the absence of the Chief. To answer all communications, regardless of their nature, varied qualifications are required. Hence there can be no reason given why he should work for so much less than is willingly paid to others. The Legislature should therefore accept my suggestion, and provide sufficient appropriations to not alone pay a salary equal to the sum paid to clerks in other like departments of the State, but also increase the amount for clerk-hire sufficiently to warrant the employment of two clerks, one of whom should strictly attend to the correspondence and reports of accidents, and the other to the recording of reports, shipping, etc., etc.

ACCIDENTS.

The following act to provide for the collection of information relative to accidents occurring in the workshops and factories of the State, so wisely enacted by the 68th General Assembly, has already shown its good qualities, and the importance of information of this character, elicited through this act, cannot well be overestimated. It has a very beneficial effect in causing manufacturers to give more attention to the condition of their machinery, and in fact their establishments in general, thereby avoiding many accidents which otherwise might have occurred :

AN ACT.

SECTION 1. *Be it enacted by the General Assembly of the State of Ohio*, That it shall be the duty of all manufacturers of the state, to forward by mail to the chief inspector of workshops and factories, at Columbus, a report of each and every serious accident resulting in bodily injury to any person which may occur in their establishment, giving particulars of the same as fully as can be ascertained, upon blanks which shall be furnished by the chief inspector of workshops and factories. If death shall result to any employee from any such accident, said report shall contain the age, name, sex and employment of the deceased, whether married, the number of persons, if any, deprived of support in consequence thereof, and the cause of the accident, if known. If the accident has caused bodily injury of such a nature as to prevent the person injured from returning to his or her employment within six or more days after the occurrence of the accident, then the report shall contain the age, name, sex and employment of the disabled, the nature and extent of the injury received, how caused, if known, how long continually disabled, loss of time and wages therefrom, and if possible the expense thereby incurred in full.

PENALTY FOR FAILURE TO SO REPORT.

SEC. 2. That any manufacturer who shall fail to comply with the requirements of this act in each case of death by accident within seven days thereafter, and in each case of injury by accident within thirty days thereafter, shall be fined in any sum not less than *ten* dollars nor more than *fifty* dollars.

THE TERM "MANUFACTURER" DEFINED.

The term manufacturer, as applied in section 1 and in section 2 of this act, shall be held to mean any person who, as owner, manager, lessee, assignee, receiver, contractor, or who, as agent of any incorporated company, makes or causes to be made any kind of goods or merchandise, or who owns, controls, or operates any street railway, laundrying establishment, or is engaged in the construction of buildings, bridges or structures, or in loading or unloading vessels, or cars, or moving heavy materials, or operating dangerous machinery, or in the manufacture or use of explosives.

SEC. 3. It shall be the duty of the chief inspector of workshops and factories to supply all blanks necessary to make said reports, as required in this act, and to prosecute all violations of this act when the same shall come to his knowledge; provided, that the furnishing of said blanks shall be a condition precedent to prosecution in any case.

Passed March 21, 1888.

Though the law has been in force but a short time, the manufacturers and operators of the State have acknowledged the beneficial effects of the

act by promptly complying with its provisions in nearly every instance. At the outstart a great deal of labor was necessary—printing of circulars and blanks, mailing them to manufacturers and operators, etc., in order that the provisions of the law might be carried out, and all accidents happening in the State properly reported. The circular issued by the Chief Inspector contains on one page all the laws connected with the department, and on the second page the following questions:

FORM TO BE USED FOR REPORTING ACCIDENTS.

Name of Manufacturer
 Location—City or Town Name of street and
 number of building County.....
 Name of person or persons killed
 Name of person or persons injured.....
 Sex Age..... Married or single
 Date of accident Date of death.....
 Cause of accident

 At what employed
 Number of persons deprived of support in consequence of the accident.....
 Nature and extent of injury

 How long continuously disabled.....
 Expense thereby incurred.....
 Loss of time and amount of wages.....

GENERAL REMARKS.

.....

The blank containing the questions, after being properly filled out, is detached from the first page, thus leaving every employer a copy of the factory inspection laws for future reference.

I would recommend the striking out of the following words in this law in section 2, under the head of "Manufacturer" Defined:

"Street railway, or in loading or unloading vessels, or cars, or moving heavy materials." And in the last line of the same section, "or in the manufacture or use of explosives," strike out "*or use.*" It is next to impossible to gain the information desired without an enormous expenditure to the State, and also a great loss of time to the department.

FIRE-ESCAPES.

In this line a great number of the Chief Inspector's leisure hours have been spent in the study of the best means for escape in case of fire. Inventions of various kinds have been made and placed upon the market in different sections of the country, but the most of them have proven either too complicated or too expensive to be placed to practical use. This, however, only encouraged me to energetic experimenting, and I have at last invented *the simplest, best, cheapest, and only safe escape ever yet presented to the public*, a model of which can be seen at the Chief Inspector's office in the Capitol Building, and a cut of which appears further on in this report.

This invention was unanimously approved by the National Association of Factory Inspectors of North America at their last convention, held June 8th to 10th in the city of Boston, by the adoption of the following resolution:

Resolved, That this Convention recommend the fire-escape invented by Chief Dorn, of Ohio, as embodying the best and most practical idea yet devised for factories, public buildings and tenement-houses.

The escape consists of an ordinary stairway built exclusively from iron, two of which are required in a building, located so that they are in an opposite direction to each other. They are inclosed with a brick wall, twelve inches in thickness, which forms a shaft, the same as used for elevators, reaching from the bottom to the top of the building. There is no communication with the stairway from the *inside* of the building. This is done for the purpose of preventing smoke as well as fire from entering the stairway in case of a conflagration. An iron balcony is built on the outside of the building at each story, a door leading from each floor, the door from the floor opening outwardly, and is constructed along side of shaft leading into the balcony, where another door is reached, which opens inwardly to the shaft. The doors on each floor open against the adjoining windows, so that a person trying to reach the balcony is not exposed to the flames, should the draught carry the same in that direction. In case of fire, not a particle of smoke can get into the stairway, and escape is made easy, even if the entire building be on fire, on account of having all communication with the stairway on the outside.

This escape evidently obviates a serious objection made to all others, viz., the fear individuals have of descending them, especially from very high buildings.

The openings of the doors outward and inward are so constructed that in case of emergency they can not be blockaded, as is very often the case in serious conflagrations.

The shaft is lighted by making the doors entering the same half-glass

pannels, and the top of the shaft is also provided with a sky-light which furnishes sufficient light to make the stairway as well lighted and ventilated as possible.

Your honorable body has been requested, through former reports issued from this department, to amend the inspection law in regard to fire-escapes, but no action in that direction has been taken. Recommendations have been made to the operators of hundreds of establishments in the State to provide suitable means of escape from that most horrible of all deaths—being consumed by flames—which in most cases were willingly complied with. The general interest awakened through the efficient work of the inspector has caused the erection of many fire-escapes, even on buildings not within the jurisdiction of this department. Yet we need a more perfect law, one that will give the inspector full power to approve or disapprove the construction of fire-escapes; also a law which will place the responsibility for the erection of suitable fire-escapes upon the owner of a building and cause him, instead of the tenant, to be held liable for damages resulting from the want of sufficient means of escape in case of fire.

ELEVATORS.

The elevator is a machine which is so extensively used of late, that it seems almost impossible to do without it. Some years ago an elevator was almost a curiosity; to-day it is in general use, and, in fact, has become a necessity. When we consider how few of the passengers know anything of the safety of the elevator on which they ride, or realize the danger to which they may be subject, we see how important it is that this mode of conveyance should, by all means, be under the supervision and control of the State. Of the many duties of the factory inspector, none are of more importance than those connected with elevators. Attention to the enactment of laws in regard to this important matter has been thoroughly discussed in my former reports, and it seems to me that the Legislature could perform no wiser act than to pass a law giving the inspector more power in this direction. Many elevators were found throughout the State the past year which ought to have been condemned, or the inspector empowered to issue orders prohibiting the use of such death-traps until they had been put in a safe condition. A rigid investigation has been instituted in regard to cables, and many of them were found in very dangerous condition. New cables were ordered, and in many instances protests from manufacturers were received by the Chief Inspector against compliance, but on personal investigation the recommendations of district inspectors were, in nearly every case, sustained, and the manufacturers ordered to provide new cables.

A law should be enacted similar to the laws of Massachusetts, by which the inspector is empowered to post an official notice on the elevator cage, prohibiting the use of the elevator until the necessary repairs are made, under penalty of the law. A clause should also be embodied in this law, compelling owners of elevators to provide them with automatic gates.

To lessen the dangers arising from the use of elevators, I would recommend that where they are used, especially for heavy freight, that strong timbers be placed across the opening in the floor, then in case the cable should break the cage could not fall to the bottom. I would also recommend that cables be kept well oiled at all times, as this will prevent the gathering of extraneous matter causing rust. The springs operating side or safety-catches should be inspected from time to time, to ascertain whether they are in working order. This can easily be done by placing cross-pieces over the opening in the floor, and allowing the elevator to slowly descend to and on the same. Should they refuse to work, a slight tightening of the screw in the center of the spring would remedy the defect.

SAWS AND FRIZZERS—THEIR DANGERS.

Under this head we include buzz, band, swing saws and frizzers. Much has been said about those dangerous implements in my former reports, and I am grateful that many accidents have been prevented since the creation of this department. Yet, I must say, however, that a number of accidents have occurred, principally through the refusal of workmen to use saw-guards as a protection, after they had been furnished by the proprietors of establishments, through the recommendation of the inspector; and on the other hand, accidents have been of frequent occurrence where the proprietor neglected to furnish guards, when requested to do so. In the latter case, it would be proper for the injured parties to notify the inspector at once. The utility of saw-guards is now generally recognized, and parties using them are anxious to avail themselves of the benefits derived from their use. The simplest and cheapest guard now in use, and one that, in my judgment, interferes least with the work of the sawyer, is that manufactured by the "Indianapolis Saw-Guard Company," of Indianapolis, Indiana.

In many instances workmen become careless and allow their saws to run, whether in use or not, and as they usually run at a very high speed, it is almost impossible for persons to see whether the saw is in motion or at a stand-still. Where the saw is provided with a guard, this would not be dangerous, but where such protection is not in use, this habit very frequently proves disastrous to the sawyer, or other employes or persons in

the factory. All manufacturers should post notices in their respective establishments, forbidding the running of saws when not in actual use. By this means many serious accidents would be prevented.

Band-saws, or endless saws, we find, in most cases, not properly protected. They should be guarded by an angle-iron, about twelve inches in length, immediately above the upper pulley, so that in case of a break, which frequently occurs, the operative would not be in danger of being injured about his head; they should also be properly guarded beneath, to protect the lower part of the operative's body in case of breakage.

Swing-saws are also very dangerous mechanical implements, and should always be covered as far down as possible, and provided with a stopper on top of frame, so that in case of a breakage of the rope or spring, whichever the saw may be provided with, to prevent its swinging out further than the edge of the table on which it is operated. This can be easily done, and at so little expense to the owner that it may be called costless.

Frizzers, or shapers, as they are commonly called, are tools which are very difficult to protect by an outside guard or hood, as the operative can not well see his work. The simplest and best way, in my estimation, at least my experience has so taught me, is to bolt a board or plank on the table just near enough to the work to allow the molding to be made. This board or plank will, in case a hard or soft spot is met, prevent the wood from being drawn in by the cutter, and thereby save the operative from being injured. The cutters which are ground into a sharp angle are not as useful as those having about a sixteenth of an inch sharp angle, and the rest of the cutter rounded off. The latter will do smoother work and also prevent the wood from being drawn in suddenly when passing over a soft or hard spot. The key which holds the cutter should always be driven in tight and carefully adjusted, so as to prevent the cutter from becoming loose and flying out. Many accidents have occurred through the careless way of driving keys, and even lives have been lost by flying cutters.

BOILER INSPECTION.

As in my former reports, I desire to again call the attention of the Legislature to the very important matter of Boiler Inspection. I deem it unnecessary to repeat the remarks made in my third and fourth annual reports, to which subject the Legislature paid but *little or no attention*, but *I do deem it absolutely necessary* to again ask your honorable body to enact such laws as will, in a great measure, avoid the wholesale slaughter and destroying of human lives and property. As recommended in my former reports, I would suggest that a law be enacted by which all owners of boilers will be compelled—first, *to employ men who have the necessary qualifications to pass a thorough examination as Stationary Engineers, before a competent board of ex-*

aminers; and second, to compel owners of boilers to insure them in some one of the responsible companies transacting business in this or others states.

To call your attention to the importance of the enactment of such a law, and how anxiously this legislation is desired, I publish the following letter from the "National Association of Stationary Engineers:"

COLUMBUS, O., August 5, 1888.

HON. HENRY DORN, *Chief Inspector of Workshops and Factories:*

DEAR SIR: The members of Branch No. 9, N. A. S. E., request me to return to you our thanks for your fourth annual report. The Association heartily indorsed your views in regard to State boiler inspection, and would respectfully ask you to use your best endeavors to have enacted a law providing for the licensing of all persons having charge of steam boilers under pressure, in order that the competent and careful engineer may be protected from the lunk-head and boiler-buster.

Yours, etc., etc.,

S. V. SWANEY, *Secretary.*

That the people all over the country are taking a deep interest in this matter is shown by the following letter published by William McClellan, of St. Louis, Missouri:

BOILER INSPECTOR'S OFFICE, CITY HALL,

ST. LOUIS, September 28, 1888.

To Inspectors of Boilers and Boards of Engineers:

DEAR SIR: You are requested to attend a Convention of Inspectors of Boilers and Examiners of Engineers, to be held at Pittsburgh, Pennsylvania, on November 20, 1888. The purpose of the Convention is the discussion of the inspection service and laws, for the better protection of life and property, and also to arrange for a uniform system of inspection throughout the country where there is an inspection service, and to endeavor to extend the service to cover the entire country, and to stop the sale of old and worthless boilers that have been condemned by inspectors and are then sold to ignorant and inexperienced persons throughout the country where there is no inspection service.

Respectfully,

WILLIAM MCCLELLAN, Inspector of the City of St. Louis, Missouri,
WARDELL GUTHRIE, Inspector of the City of Chicago, Illinois,
PETER P. EGAN, Inspector of the City of Denver, Colorado,
WASHINGTON MULLEN, Inspector of the City of New York,
JAMES W. MORSE, President State Board of Inspectors of Minnesota,
J. H. STANDEVEN, Inspector of the City of Omaha, Nebraska,
E. D. BATEMAN, Inspector of the City of Cincinnati, Ohio,

Committee.

Now, as this is a matter purely humanitarian in its nature, and sought for by everybody for their own protection, I hope that your honorable body will give this urgent appeal your careful consideration and cause the enactment of such laws as are asked for by those interested, through the agency of the Chief Inspector of Workshops and Factories of this State.

My experience as a mechanical engineer has been such, that I knew

whereof I spoke, when I asked in my former reports such legislation as would be a safeguard to the people and avert catastrophies which are of almost daily occurrence from boiler explosions.

As a matter of information, in regard to boiler inspection laws, from which it is possible something may be learned that will be of value to our legislators, I copy below the ordinance governing "Stationary Boiler Inspection and Board of Engineers" of the City of St. Louis, Mo.

STEAM BOILERS.

SECTION 1619. The mayor shall appoint, by and with the consent of the council, a boiler inspector, who shall be a practical mechanical engineer, and competent to test and inspect steam-boilers and all steam-generating apparatus under pressure. Said boiler inspector is authorized to employ, by and with the consent of the mayor, one deputy inspector, who shall possess the same qualifications as the boiler inspector and perform the same duties. He shall also appoint a clerk, who shall act as collector for the boiler inspector. The boiler inspector, his deputy and clerk shall hold their offices for the term of four years, and until their successors are appointed and qualified. The boiler inspector, in addition to one deputy, shall employ, with the advice and consent of the mayor, upon the written application of any steam-boiler inspection and insurance company, duly authorized by the insurance laws of the state of Missouri to transact business as an inspection and insurance company in the state of Missouri, one assistant boiler inspector (for every such company making an application therefor), who shall inspect and test the boilers insured by the company employing him, and no others. The said assistant boiler inspector shall serve without compensation from the city and hold his office until removed by the mayor, at the request of the company he may represent. The mayor shall also appoint, by and with the consent of the council, two persons, one of whom shall be a practical and mechanical engineer, and one shall be a manufacturer of engines and steam machinery; both shall have at least five years' experience in their business, who, in connection with the boiler inspector, shall constitute a board of engineers.

SEC. 1620. The boiler inspector shall devote the whole of his time and attention to the duties of his office, and also perform the duties of secretary of the board of engineers. He shall carefully inspect and test every stationary boiler and steam-generating apparatus under pressure used for stationary power, as provided by this chapter, including all attachments and connections, located within the city of St. Louis, at least once annually. He shall keep in the office of the board of engineers a complete and accurate record of the names of all owners or users of steam-boilers, giving a full description of the boilers inspected by him, and the amount of pressure allowed the date when last tested. He shall notify all owners or users of boilers of the time when a reinspection and test will be made, at least ten days before the expiration of each certificate of inspection, and appoint a day on which he will make a reinspection. The manner of inspection shall be substantially as follows: The owners of steam-boilers and users shall have the option of taking the hammer test or the hydrostatic test; also of electing whether the boiler inspector or one of the assistant inspectors, mentioned in this chapter, shall make such test. If the hammer test be asked for, the examination shall be thorough and searching upon every part of the boiler, both internally and externally, including all fittings and attachments. If the hydrostatic test be asked for, each boiler shall be tested by the hydraulic pressure one-fourth greater than the ordinary working steam-pressure used, and the certificate of inspection herein provided shall state the maximum pressure at which any boiler may be worked. In case a defect shall be discovered in any boiler or attachment thereto, the boiler inspector shall report the same to the owner or user of said boiler or boilers, and state the facts of the case in writing, giving a description of the particular locality in which each defect may be found, and whether of a dangerous character and

necessitating immediate repair. If the boiler inspector shall at any time find a boiler which, in his judgment, is unsafe, after inspecting same he shall condemn its further use. All boilers to be tested by hydrostatic pressure shall be filled with water by the owners or users, and they shall furnish the necessary labor required to work and handle the pumps in applying the test. When leaks occur which prevent a successful test the boiler inspector shall make a second test, upon receiving notice that all leaks have been repaired. If upon making a second test the boiler or boilers are still defective, he shall, for each subsequent test, collect an additional inspection fee, but in no case shall he give a certificate until fully satisfied of the safety of the boiler or boilers. All certificates of inspection shall be for one year and no longer. Any owner or user of any boiler or boilers insured by any steam-boiler inspection and insurance company duly authorized to transact business in the state of Missouri shall, upon his request, have the hydrostatic test applied once annually, without extra charge, by the assistant boiler inspector of such company, as provided in this chapter.

SEC. 1621. The boiler inspector and board of engineers shall be provided with an office in the city hall, suitably furnished, including all needed blanks, stationery, and the mechanical appliances needful for their official duties. Said board shall provide for regular sessions, and the boiler inspector shall act as secretary and keep minutes of the proceedings. Said board shall convene for business once in each week to examine into the qualifications of applicants for engineers' licenses. A majority of the members of said board shall constitute a quorum for the transaction of business. The secretary shall keep a register of the names of all applicants, designating those found qualified and those not qualified. Said board shall grant certificates of license, without charge for one year from the date thereof, to all applicants who upon examination shall have the capacity, skill, experience and habits of sobriety requisite to perform the duties of an engineer; and no person possessing such qualifications shall be refused a license. Said board of engineers shall vise all engineers' licenses presented by the owners thereof, granted to them by United States laws, which shall have the same effect as licenses granted by the board; and the engineers whose licenses are viséed by the board shall be subject to the provisions of this chapter. All certificates of licenses granted shall be signed by not less than two, and may be signed by all the members of the board. The board of engineers may adopt such rules and regulations as they shall deem proper, not inconsistent with this chapter and the general law. A full board of engineers, by an unanimous vote, shall have power to revoke an engineer's license for inebriety, dishonesty or neglect of his duties, when in charge of an engine in use, and may order the re-inspection of any boiler whenever they shall deem it necessary for the public safety; but no license shall be permanently revoked for cause without first giving the accused party an opportunity to be heard in his own defense.

SEC. 1622. Any owner or user of a steam-boiler, feeling aggrieved on account of any decision of the boiler inspector, may appeal to the board of engineers, and upon a thorough and careful investigation of the matter at issue between the parties, a majority of the board shall decide the question, which decision shall be final in all cases; but the boiler inspector shall not have a voice in any matter in which there is an appeal from his decision.

SEC. 1623. The owners or users of steam-boilers or engines of a capacity of not over seventy-five square feet of heating surface, a pressure of not over twenty-five pounds of steam to the square inch and all boilers under a pressure of fifteen pounds to the square inch used for heating only, may apply for and obtain a permit to employ a careful and trustworthy person instead of a licensed engineer, such person to be recommended by two citizens, one of which shall be a steam user or licensed engineer, which permit shall be granted. The boiler inspector shall have power to revoke such permit for cause. (In case the owner or user of any boiler shall for cause be deprived of the services of a licensed engineer he may put a trustworthy and careful person in charge for a time not exceeding six days.) When boilers are used for engines running day and night, the owner or user of steam-power may employ some trustworthy person in place of a licensed

engineer, not exceeding twelve hours at a time, under the instruction of a licensed engineer in charge. Any violation of this section shall be deemed a misdemeanor, and on conviction thereof punishable by a fine of not less than twenty-five dollars nor more than three hundred dollars.

SEC. 1624. All owners or users of any stationary boiler or boilers, or steam generating apparatus under pressure, shall have the same inspected and tested as herein provided, before and while being used, and at least once a year thereafter; and for every neglect or refusal to have such inspection and test, they shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in a sum not less than twenty-five nor more than two hundred dollars. On the written application of any owner or user of a steam-boiler or boilers, or steam generating apparatus duly countersigned by the assistant boiler inspector of any steam-boiler inspection and insurance company which is authorized to transact business as herein provided, it shall be the duty of the boiler inspector, upon the receipt of such an application, to direct the assistant boiler inspector who countersigned the application to inspect the boiler or boilers of any such owner or user making such application, by the hammer test; and the assistant boiler inspector shall, after performing the duty, report upon the same to the boiler inspector, who shall thereupon give the said owner or user a written copy of the report of such assistant boiler inspector and a certificate of inspection, upon payment of the fees required by this chapter; and the said inspection and certificate shall be valid and accepted as in full compliance with the provisions of this chapter. If owners or users of steam-boilers, or engineers in charge of the same shall carry a greater pressure than is allowed in the certificate of inspection granted by the boiler inspector, they or either of them shall be deemed guilty of misdemeanor, and on conviction thereof, shall be fined in a sum not less than fifty dollars nor more than three hundred dollars, and in case of an engineer his license shall be revoked; or if such owners or users shall use any boiler which has been condemned as unsafe by the boiler inspector, they shall be deemed guilty of a misdemeanor, and on conviction thereof, shall be fined in a sum not less than one hundred dollars nor more than five hundred dollars.

SEC. 1625. Every owner or user of any boiler or boilers or steam-generating apparatus under pressure of over five horse-power, shall, when the boilers are in use, employ at least one competent engineer, having a certificate of license from the board of engineers, except as provided by this chapter, and every owner or user, as aforesaid, who shall neglect or refuse to employ a licensed engineer as herein provided, shall be deemed guilty of misdemeanor, and on conviction thereof, shall pay a fine of not less than twenty-five nor more than three hundred dollars.

SEC. 1626. The register shall issue to the comptroller certificates of inspection for steam-boilers, regularly numbered and duly signed by each of said officers, in denominations proper to meet the requirements of this chapter, but blank as to the owners' or users' names, date, pressure, locality and number of the boilers. The comptroller shall issue such certificates of inspection to the boiler inspector, and charge them to him; the boiler inspector shall collect from all owners or users of boilers the following inspection fees, and no more: For every boiler five dollars, whether set singly or in sets; where sets of boilers are built one above another only those immediately over the fire-bed shall be counted. The boiler inspector, upon the receipt of the money for inspection fees, shall promptly deliver to every owner or user of any boiler, certificates of inspection of the boilers inspected by him or by his assistants; every such certificate of inspection shall be properly filled up, as herein provided, and signed by said boiler inspector; said certificate of inspection shall be displayed in some prominent place near where the boilers are used. The boiler inspector shall make weekly returns to the city comptroller of all moneys collected, giving the names of the steam users from whom collected, and shall pay the money collected into the city treasury at least twice in each week.

SEC. 1627. The boiler inspector shall make a semi-annual report to the comptroller, reporting the full number of boilers in the city, the number in use, the number inspected and the number condemned as unsafe. He shall report the date, name of the

owner, and the locality of every boiler accident, whether it be from a rupture or collapse of flue or explosion of the shell of a boiler, stating his belief as to the cause thereof. He shall further report the number and the names of applicants for engineers' licenses, the number rejected and the number granted certificates. Such report shall be signed by the full board of engineers and open to the inspection of all persons interested.

SEC. 1628. The boiler inspector shall receive a salary of eighteen hundred dollars per annum, which shall be in full for all services rendered by him. He shall give bond to the city of St. Louis in the penal sum of five thousand dollars, with two or more sureties, to be approved by the mayor and council, conditioned for the faithful, skillful and impartial performance of the duties of his office, and that he will fully account for and pay into the city treasury all moneys received by him, as herein provided. The deputy inspector appointed under this chapter shall give a bond in the penal sum of one thousand dollars, with the same conditions as required of the boiler inspector, and subject to the approval of the mayor and council. The assistant inspectors appointed under this chapter shall each give bond to the city in the penal sum of five thousand dollars, conditioned as to the bond required of the boiler inspector, and further to save the city harmless by reason of any neglect or refusal to faithfully perform the several duties required by this chapter. The deputy boiler inspector shall devote his entire time to the duties of his office, and be paid for his services the sum of nine hundred dollars per annum. The boiler inspector shall be responsible for the acts of said clerk, and may require him to give bond. Said clerk shall receive a salary of nine hundred dollars per annum, payable monthly. The members of the board of engineers, except the boiler inspector, shall each receive four dollars for each session at which they are present, provided said board shall not hold to exceed one session per week. They shall each give bond in like manner as the boiler inspector, with same conditions, and in the penal sum of five hundred dollars, said bond to be approved by mayor and council. The salaries of the officers herein created shall be paid out of the appropriation for board of engineers and boiler inspector. The board of engineers and deputy inspector appointed under this chapter shall each possess the qualifications prescribed in section 10, article 4, of the charter.

SEC. 1629. If the boiler inspector, his deputy or assistants, shall neglect or fail to discharge his or their duties by reason of inebriety or by neglecting to perform the duties of inspector, or to pay over moneys received for inspection as provided in this chapter, or in any manner use their position for corrupt or dishonest purposes, he or they shall be deemed guilty of a misdemeanor, and on conviction thereof, be fined in a sum not exceeding one hundred dollars, and forfeit his or their office.

SEC. 1630. The engineers, engines and boilers of the fire department of St. Louis, and the locomotive boilers used on railroads, and steam-boilers supplied with water automatically, and having no pump or injecting, and used only for heating dwelling houses not carrying under pressure over eight pounds of steam per square inch, are exempt from the provisions of this chapter.

SEC. 1631. All expenditures for horses, horse feed, harness, wagons, pumps, hose and other proper expenses and necessary apparatus for the inspection of boilers, shall be charged and paid as expenses for the office of boiler inspector and board of engineers, and all bills, before being paid, shall be audited and approved by the comptroller.

SEC. 1632. Every applicant for a license who fails to pass the examination of the board is required to wait two weeks before again making application for a license, and the board shall give him another examination. Every applicant for a license must make application for a license on a blank furnished by the board of engineers for that purpose; applicants must have at least two years' experience at mechanical or steam engineering, and must write and state his experience on the blank, and applications must be signed by two citizens, one of whom must be a steam user or a licensed engineer, who shall go before the board and make oath that the statements set forth in such blanks are true facts. Every engineer licensed by the board or whose license is viséed by the board is required to notify the board when he accepts or leaves his employment, and within ten

days thereafter the name of his employer, and the location of the boilers in his charge. Any engineer who fails to give such notice may have his license revoked by the board. Application for renewal of license shall be made not later than the third meeting of the board next following the expiration of the license, and unless the above provision is complied with the board may, at its discretion, order a new examination. Any steam user failing to place or put in a conspicuous place in engine-room or boiler-house the boiler inspector's certificate, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than twenty-five dollars nor more than one hundred dollars. Any engineer licensed by the board, or any engineer whose license has been viséed by the board, shall within the first ten days of January and July, each make a written report to the boiler inspector of the condition of all boilers and apparatus in his charge. Every licensed engineer shall devote at least eight hours out of every twenty-four to the duties of the plant or building where he is employed as engineer, and if he neglects or fails to comply with this section, or if intoxicated while in the discharge of his duty he shall be deemed guilty of a misdemeanor, and on conviction thereof shall, besides the fines otherwise provided for, forfeit his license. Any person who violates or fails to comply with the provisions of this chapter shall be deemed guilty of a misdemeanor, and upon conviction thereof, when no other fine or punishment is fixed in this chapter, be fined in a sum not less than five nor more than fifty dollars for each offense.

SEC. 1632a. Before any owner, owners or users of any steam-boiler or boilers, shall have said boiler or boilers placed in position, he or they shall notify the boiler inspector, who shall examine the same, and satisfy himself that the construction, material, bracing and all other parts of the boiler or boilers are such as to assure the safety of the same.

SEC. 1632b. All boilers shall have inserted in them plugs of brass filled with banca tin, as follows: All cylinder boilers with flues shall have one plug inserted in one flue of each boiler, and also one plug in the shell of each boiler, as follows: All plugs in shells shall have an external diameter of not less than that of one-inch gas-pipe screw tap, and an internal opening not less than one-half inch in smallest opening; all plugs to be inserted in shell from inside, on second sheet from forward end, one inch above flues; all plugs to be inserted in flues not more than three feet from after end; all plugs to be inserted in flues to have an external diameter of that of a three-fourth gas-pipe screw tap, and an internal opening of one-half inch, except flues or tubes of six inches or less, when plugs may be used with an external diameter of that of three-eighth gas-pipe screw tap, with an internal opening of one-fourth of an inch. The boiler inspector shall have power to have one plug placed in each boiler not provided for in this section, as he may deem necessary, for the safety of lives and property, and it shall be the duty of the inspector to see that such plug is filled with banca tin at each inspection.

CARELESSNESS IN THE BOILER-ROOM AND WRONG METHOD OF TESTING BOILERS.

An old saying is that "familiarity breeds contempt," and this is unfortunately true that it holds good in the boiler-room, for many accidents may be traced to the carelessness in the management of boilers which naturally follows long connection with them. Especially is this apt to be the case when a man has been so fortunate in his management of a boiler-plant for a long time as to have had no serious trouble with it.

It is customary with some mechanics to test new boilers, or even old ones which have undergone repairs, by simply subjecting them to a high steam pressure. Why any intelligent person should do this, passes my comprehension. If a boiler is *known* to be strong enough to sustain a cer-

tain pressure, there is no earthly reason to subject it to that pressure. If it is not absolutely certain that it *will* safely sustain any given pressure, then it is an act of folly, and incurs a risk that no *sensible* man can afford to take. To apply that pressure in such a manner that in the event of the boiler not proving strong enough to sustain it, an explosion will inevitably occur. The danger in such cases is usually greatly increased by caulking the seams, rivet-heads, etc., where leaks exist, while the boiler is under great pressure.

Another dangerous practice is the caulking of joints in steam-pipes while pressure is on. If pipes or fittings are corroded, as they very frequently are in such cases, there is danger that the chisel or caulking tool may be driven through the pipe. In such a case the sudden escape of steam is more than liable to seriously scald the workman. The practice is a very dangerous one, and should never be allowed. Of a similar nature to the above, and one which should be as strongly discountenanced, is the practice of screwing up man-hole, hand-hole, and similar plates, while boilers are under steam pressure, to stop leakage. A great many accidents have been caused in this manner. The following accident occurred some years ago: A battery of three horizontal, tubular boilers were fired up, and on raising steam the joint of one of the man-hole plates was found to leak quite badly. Instead of letting down the steam and repacking the joint, a wrench was applied and the attempt was made to stop the leak by screwing up on the bolt. This proving insufficient, a long piece of pipe was slipped over the handle of the wrench and more force applied. The immediate result was the fracture of the man-hole frame, the explosion of the boiler, the destruction of about \$10,000 worth of property, and the loss of three lives.

CHILD-LABOR.

Under this head so much has been said, so many suggestions and recommendations made and forcible arguments presented in my former reports, that it would seem that the grounds had been thoroughly gone over and no space left for further comment. It certainly is not to the credit of the great State of Ohio that this question has not received the attention that it so justly merits by its legislators.

Massachusetts, New Jersey, New York and other states in the Union have laws far superior to those of the State of Ohio. To show the great necessity of legislation in regard to child-labor, I will give a few facts as they have presented themselves during the past year.

The Fostoria Glass Company has in its employ some thirty or more children, imported, I am informed (and I have no reason to doubt the

authenticity of the information), from an orphans' home in Brooklyn, N. Y., a great number of whom the inspector is in doubt as to whether they are twelve years of age. The company was directed by the inspector to prepare a record of their ages.

This plainly sets forth the fact that the laws of New York, in regard to child-labor, must be far superior to those of Ohio, otherwise the children would not be imported into our State.

As a further illustration that laws should be enacted to protect, not alone the children themselves, but the workingmen and women from the competition of child-labor, the following letter, received at this department, is herewith produced:

DALZELL, GILMORE AND LEIGHTON CO.,
Manufacturers of Glassware in Crystal and Rich Colors,
FINDLAY, OHIO, U. S. A., October 31, 1888.

In compliance with your verbal instructions, we posted notice left by you; have also taken steps to secure boys of proper age, our Secretary, Mr. F. A. B. Dalzell, and Manager Mr. Wm. F. Russell, having left this evening for the East with this object in view.

The above letter shows that the "East" is the place where children can be obtained at a low rate of wages and brought into our State to take the places of adults who are striving, day after day, to earn sufficient means to supply their families with bread and other necessities of life. Were the employment of children under fourteen years of age prohibited in our workshops and factories, thousands of parents, now earning little or nothing at all, would be profitably employed and enabled to earn enough to support their children while receiving such instructions in school as their future welfare demands, and the *framers of our constitution intended they should receive*. Every child employed in our workshops, factories, telegraph offices, mercantile establishments or places where goods are sold, etc., takes that much work from a grown-up person, besides lessening the compensation paid for such labor, thus eventually compelling parents of moderate means to withdraw their children from school and subject them to the same wrong.

I would, therefore, recommend that laws be enacted similar to those of Massachusetts, New Jersey or New York, and by all means that the age of minors not allowed in workshops, factories, mercantile establishments, telegraph offices, or where goods are sold, etc., be increased to fourteen years.

Many manufacturers in the State have expressed themselves as perfectly satisfied with the child-labor laws now existing, but suggest that it would be better to prevent children under fourteen years of age from work-

ing in such establishments as have been heretofore mentioned. The importance of this subject is becoming greater day by day, and year by year, and the rapid increase of all kinds of manufacturing interests naturally causes competition and induces employers to avail themselves, on the score of economy, of as much child-labor as possible. Now, I ask your honorable body, will you longer allow the recommendations so often made to be treated with silence? Or will you enact laws which will protect the children of our great State? It is for you to decide.

COMPULSORY EDUCATION.

The second annual convention of the National Association of Factory Inspectors of North America, held at the City of Boston, June 8th to 10th, 1888, the proceedings of which will be found in another part of this report, unanimously adopted the following resolution, which should be carefully read by every member of the Legislature, and prompt action taken thereon. I consider compulsory education the leading question of the day, and no time should be lost in enacting such laws as will put it into practical operation.

Resolved, That the Factory Inspectors of the United States, in convention assembled, knowing from experience and observation the evils existing in factory life, and the attendant ignorance prevailing among the factory operatives through lack of effective educational laws, call the attention of legislative bodies and the intelligent voters of the nation to this subject. Recognizing the fact that education is necessary to good citizenship, we advise the enactment of *stringent compulsory education laws* in every State, and the creation of special officers for their proper enforcement. We insist that all children under *fourteen* years of age should be prohibited from laboring in mercantile and manufacturing establishments. It is against good morals that the sexes should be compelled to use the same or adjoining toilet-closets, and against the laws of health that crowded, ill-ventilated and filthy factories and tenement houses should be permitted to exist, and the Legislatures of the different States ought to immediately pass laws abolishing these evils. The defective construction of machinery, buildings and elevators throughout the land cause the loss of lives and limbs of hundreds of people annually, and therefore it becomes the duty of the States to place upon their statute books such enactments as will be conducive to the safety of both workers and tenants; and

Resolved, That where factory inspectors now exist, their number should be increased to enable them to properly perform their duties, and where they do not exist, such departments should be created; and

Resolved, That in the framing of the laws advised in the foregoing, we cordially recommend a study of the factory legislation of the State of Massachusetts.

SEATS FOR FEMALE EMPLOYEES.

The injury to the health of female employes in workshops, factories and mercantile establishments throughout the State, in consequence of their being compelled to be constantly on their feet, is undeniable. The Legislature enacted a law in 1885, the evident intent of which was highly commendable, but unfortunately, by some unaccountable oversight, it was so worded as to render it valueless. The present law reads as follows:

AN ACT

For the preservation of the health of female employes employed in manufacturing, mechanical and mercantile establishments.

SECTION. 1. *Be it enacted by the General Assembly of the State of Ohio,* That every person or corporation employing female employes in any manufacturing, mechanical or mercantile establishment in this state, shall provide suitable seats for the use of the female employes so employed, and shall permit the use of such by them when they are not necessarily engaged in the active duties for which they are employed.

SEC. 2. Any person or corporation violating any of the provisions of this act, shall be punished by a fine of not less than ten dollars nor more than twenty-five dollars for each offense.

It is plainly visible that the latter part of the above section 1 defeats the sole object of the law, so far, at least, as concerns employes in manufacturing and mechanical establishments. I would therefore recommend that the law be amended by striking out all after the word "employed," near bottom of section 1 and inserting the following: "And shall permit the use of seats at all times, when such use does not actually and necessarily interfere with the proper discharge of their duties."

In most cases a female can perform her duties in a workshop or factory just as well sitting on a chair, stool or bench as she can standing, and to require her to become unnecessarily exhausted to simply gratify a silly whim of an employer, looks too much like tyranny to be longer tolerated. There seems to be a unanimous opinion on this subject, not usual on questions relating to labor or laborers. Every thing that can be done to promote the comfort and health of the female employes of the State, not inconsistent with the rights of employers, should receive the hearty and prompt indorsement of the Legislature.

THANKS.

Again I desire to return my sincere thanks to those publishers who have so generously supplied this department with a copy of their publications free of cost. The fact as well as the motive which prompted the act of their liberality is duly appreciated. A great deal of information is gained from these publications, and they are anxiously sought for by the working class of people who so frequently visit this office. I sincerely hope that those for whose benefit these papers are published will show by their acts that they understand the importance of giving them their hearty support.

I desire also to return thanks to my worthy assistants for the able manner in which they have performed the duties incumbent upon them. Though the number of shops and factories allotted to each in their respective districts have proven too vast for all to receive their attention during the past year, yet their work has been well and satisfactorily performed, and deserves commendation.

15	R. H. Pfaff & Brother.....	South Main street.....	Carriages, sleighs, etc.....	8	.....	See No. 16.
16	W. S. Brinham.....	Prospect street.....	Flour and feed.....	10	.....	" 17.
17	Snyder Manufacturing Co.....	".....	Biggy poles and shafts.....	25	.....	" 18.
18	Bradley Manufacturing Co.....	Bridge street.....	Gas fixtures.....	8	.....
19	McKinnon Brothers.....	River street.....	General machine work.....	Idle	.....
20	Kunkle Brothers.....	Ann street.....	Planing mill.....	15	80	See No. 21.
21	The London Rubber Co.....		Rubber clothing.....	15	80	

BELMONT COUNTY.

BARNESVILLE.

726	Hall & Wright.....	South Arch street.....	Machinery.....	2	6	3	See No. 727.
727	Barnesville Woolen Mills.....	East Church street.....	Blankets, flannels, etc.....	6	5	.....
728	Charles Kugler.....	South Chestnut street.....	Doors, sash, etc.....	7	.....	.....
729	S. C. Hilles & Brother.....	".....	Flour and feed.....	5	.....	.....
730	T. & A. Rodgers.....	Near South Chestnut street.....	Doors, sash, etc.....	9	.....	.....
731	Heed Brothers.....	Chestnut and South streets.....	Cigars.....	50	20	8	See No. 730.
732	Hanlon Brothers & Co.....	Chestnut street.....	Printing and paper.....	11	4	2	
733	City Mills.....	Main and Gardner streets.....	Flour and feed.....	4	.....	.....	See No. 733.
734	John F. Bulger.....	Main street.....	Cigars.....	6	3	2	
735	Barnesville Enterprise.....	".....	Printing.....	5	4	.....
736	Geo. E. Hunt.....	".....	Merchant tailoring.....	2	10	.....
737	The Watt Mining Car Wheel Co.....	Church street.....	Car wheels and cars.....	50	.....	.....
738	Barnesville Glass Co.....	Near depot.....	Window glass.....	125	7	5	
739	U. Damsel & Son.....	Church and Arch streets.....	Cigars.....	10	3	.....
740	Charles H. Little.....	".....	Carriages and buggies.....	10	.....	.....

BELLAIRE.

790	T. Anlt & Son.....	Belmont and Thirtieth streets.....	Flour and feed.....	6	6	.....	See No. 790.
791	Bellaire Stamping Co.....	Twenty-eighth and Water streets.....	Finishing stamped goods.....	7	5	.....
792	Actna Foundry & Machine Shop.....	Near Ohio river, south side.....	Repairing.....	15	.....	.....
793	Ohio Valley Foundry Co.....	On B. Z. & C. R. R.....	Sloves and hollow-ware.....	50	15	25	
794	Rodefer Brothers.....	On B. Z. & C. R. R.....	Lantern globes, etc.....	85	15	.....
795	Actna Glass Manufacturing Co.....	Near Ohio river, south side.....	Glassware.....	175	20	50	
796	Bellaire Fruit Jar Co.....	Belmont street.....	Fruit jars.....	100	7	30	
797	Union Window Glass Works.....	Near C. & P. R. R.....	Window glass.....	65	5	.....
798	Stewart & Ward.....	Twenty-eighth and Water streets.....	Flour, etc.....	8	.....	.....
799	Crystal Window Glass Co.....	Near C. & P. R. R.....	Window glass.....	60	5	.....
800	Lantern Globe Co.....	Thirty-sixth street.....	Lantern globes.....	80	20	10	
801	Bellaire Bottle Co.....	Between Thirty-fourth and Thirty-fifth streets, 4th Ward.....	Bottles.....	110	.....	.....
802	Belmont Glass Works.....	Near C. & P. R. R.....	Table glassware.....	185	20	30	See No. 802.
803	Bellaire Steel Nail Works.....	Central avenue.....	Steel nails, etc.....	600	20	50	
804	DuBois & McCoy.....	Central avenue.....	Doors, sash, etc.....	28	.....	.....
805	Bellaire Stamping Co.....	Near C. R. & W. R. R.....	Stamped goods.....	85	25	30	
806	Bellaire Window Glass Works.....	Near B. Z. & C. R. R.....	Window glass.....	110	.....	.....
807	Enterprise Window Glass Co.....	Near B. Z. & C. R. R.....	".....	55	5	.....

BRIDGEPORT.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
808	R. J. Baggs & Son.....	Near C. & P. R. R.....	Doors, sash, etc.....	35			
809	Bridgeport Machine Shop.....	".....	Machine repairing.....	4			
810	Standard Iron Co.....	".....	Corrugated iron.....	196		10	
811	E. C. Leech.....	Near C., L. & W. R. R.....	Barrels.....	5			
812	E. F. Rhodes.....	Bank street.....	Flour and feed.....	15			
813	Aetna Iron & Steel Co.....	Near C. & P. R. R.....	Iron and steel.....	600		15	
814	Bridgeport Glass Co.....	".....	Fruit jars.....	75		10	

MARTIN'S FERRY.

815	Martin's Ferry Keg and Barrel Co.....	Near C. & P. R. R.....	Kegs and barrels.....	50		5	
816	Branch of Benwood Mills.....	" O. V. R. R.....	Pig iron.....	60			
817	Laughlin Nail Co.....	" C. & P. R. R.....	Nails.....	225	25	50	
818	Elson Glass Co.....	".....	Table glassware.....	260		50	
819	D. H. Souders.....	First street.....	Wagons and buggies.....	5			
820	B. Exley & Co.....	Second and Hanover streets.....	Doors, sash, etc.....	10			
821	Novelty Glass Mould Works.....	Penn street.....	Glass moulds.....	10			
822	George McKim.....	Near C. & P. R. R.....	Nail machines.....	5			
823	Buckeye Glass Co.....	First and Hanover streets.....	Flint and fancy glassware.....	250	100	100	See No. 823.
824	Henry Warwood.....	" Walnut streets.....	Miners' tools.....	3			
825	William Mann.....	" Locust streets.....	Furnace work, etc.....	24			
826	L. Spence.....	" Walnut streets.....	Engines, etc.....	25			
827	Northwood Glass Co.....	" Locust streets.....	Blown and pressed table ware.....	220	20	100	See No. 823.
828	Spence, Baggs & Co.....	" Jefferson streets.....	Stoves, etc.....	28			

COLUMBIANA COUNTY.

WELLSVILLE.

856	J. Lythe & Sons.....	Near C. & P. R. R.....	Sewer-pipe, etc.....	55			
857	Wellsville Plate and Sheet-Iron Works.....	".....	Plate and sheet-iron.....	200		10	
858	Stevenson & Co.....	Fulton street.....	Foundry and machine work.....	28			
859	Whitacre & Co.....	".....	Wood turning, etc.....	30	10	10	
860	Wellsville Terra Cotta Co.....	Third and Commerce streets.....	Sewer-pipe, etc.....	6			See No. 860.
861	J. H. Baum.....	" Cole streets.....	C. C. ware.....	24	8	5	
862	Pioneer Pottery Works.....	Cole and Sixth streets.....	Pottery ware.....	60	15	12	
863	Jenkins Brothers.....	Ninth and Commerce streets.....	Flour and feed.....	3			
864	J. Patterson & Son.....	Tenth and Commerce streets.....	Pottery ware.....	25	5	4	
865	C. & P. R. R. Repair Shops.....	Twelfth and Cole streets.....	Railroad repairs.....	290		10	See No. 865.
		On C. & P. R. R.....					

EAST LIVERPOOL.

[illegible]

CRAWFORD COUNTY

GALLON.

1116	Plank, Gray & Co.	Washington street	Flour, etc.	10	12	See No. 1116.
1117	Central Ohio Wheel Co.	Main street	Vehicle wheels	45	1	" 1117.
1118	Armstrong, Dally & Co.	South Market street	Planing mill	20	2	" 1118.
1119	Central Lounge Manufacturing Co.	North Market street	Lounges	14	3	" 1119.
1120	Sculer & Homer	Washington street	Foundry and machine works	20	1	
1121	N. Y. L. E. & W. R. R. Repair Shops.	Above R. R. track	R. R. repairs	330	1 40	
1122	C. C. C. & I. R. R. Repair Shops.		"	32		

CRESTLINE.

1123	Eckstein & Roff.	Pierce and South streets.	Planing mill.	13	See No. 1123.
1124	The Burch Plow Co.	Near C. C. C. & I. track.	Plows	13	" 1124.
1125	P. F. W. & C. R. Shops.	Above R. R. track.	R. R. repairs.	150	" 1125.
1126	Tallbott & Co.	East Bucyrus street.	Feed mills.	4	
1127	I. W. Pond & Son.	East South street.	Flour, etc.	4	

106	Cleveland Stair Building Co.	59 Center street	Stair builders	4		
107	M. N. Haley	63 "	Cabinet work	6		
108	Wm. Moll	57 "	General machine works	8		
109	M. B. Beelman	55-57 "	Cabinet work	10		
110	W. L. Cottrell	53 "	General pattern work	2		
111	O'Donnell & Barrett Machine Co.	53 "	Elevators, etc.	12		See No. 113.
112	H. M. Hempy & Son	47-51 "	Doors, sash and blinds	2		" 114.
113	Brooks Contracting and Building Co.	43-45 "	Contractors and builders	30		" 115.
114	Lord, Bowler & Co.	38-41 "	General machine work	40		" 116.
115	C. S. Ransom	28 "	Moorish fret work	23	1	" 117.
116	Cleveland Steam Boiler Works	28 "	Steam boilers, etc.	60	2	
117	Farnham's Brass Works	18 "	Brass goods	50	8	
118	Forest City File Works	20 "	Files	20	4	
119	The Industrial Machine Co.	20 "	General machinery	5	2	
120	Viaduct Brass Works	20 "	Brass furniture trimmings	7		
121	Cleveland Ship Building Co.	120 Viaduct	Steam ships, engines, etc.	50	10	
122	Viaduct F. Mundy Co.	10-20 West Center street	Gray iron castings	80	10	See No. 124.
123	Alfredson, Little & Co.	20 "	Elevators and general machinery	12		
124	Carriek & Cochran	18 "	Nickel-plating	12	6	
125	Avrona Vapor Stove Co.	31 West Center street	Vapor stoves	45	6	See No. 126.
126	Theodore Kundtz	30 "	Sewing machine cabinet work	285	20	
127	Macbeth & Co.	Center and Washington streets	Boilers and sheet-iron work	10		See No. 129.
128	Lamp and Brass Works of W. J. Gordon	Center and Winslow streets	Architectural iron work	40	2	
129	The Lapham-Bodge Co.	Main and Center streets	Lamps, gas fixtures, etc.	150	1	See No. 131.
130	Forest City Spring Works	Main and Center streets	Washboards	41	12	" 132.
131	C. H. Burton	Spruce and Mulberry streets	Vehicle springs	48	3	" 133.
132	J. H. Griffith & Co.	West Center street	Steam pumps	10	1	
133	Bourne & Knowles Manufacturing Co.	Main and Elm streets	Malt house	4		
134	Benodier & Keyes	41 Viaduct	Burial cases	120	40	See No. 136.
135	Belkows & Dickey	40 "	Nuts, washers and rivets	50	3	
136	Elwell & Doty	41 Viaduct	Vapor stove trimmings	18		
137	Hughes' Steam Pump Works	41 "	Steel stamps, stencils, etc.	14	1	
138	Powell Tool Co.	31 Elm street	Door knobs	10	20	
139	Cleveland Stove Co.	Main and Sycamore streets	Steam pumps	3		
140	Cleveland Spring Co.	River and Winslow streets	Stoves and furnaces	15	3	See No. 141.
141	Myers, Osborn & Co.	West River and Viaduct	Stoves and ranges	35		
142	Rubber Paint Co.	59-61 James street	Edge tools, etc.	125	10	See No. 143.
143	Cleveland Steam Gauge Co.	West street	Vehicle springs	75	12	" 144.
144	Sachs, Kirkpatrick & Co.	24 Merwin street	Stoves and ranges	75	4	
145	D. L. Scheiter & Co.	50-52 "	Paints	200	5	See No. 146.
146	Lazier Brothers	54 "	Steam gauges, forges, etc.	6	2	
147	Excelsior Water Proof Co.	60 Merwin street	Ginger ale	16	5	
148	Stone Brothers	68-70 "	Furniture	25	3	See No. 150.
149	Ullman & Philpott Manufacturing Co.	100-110 "	Sheet-iron grain palls	11	2	
150	Thomas Manning Jr. & Co.	110 "	Water-proof clothing	7		See No. 153.
151	Forest City Brass Works	152 "	Upholstering	6		
152	Garry Iron Roofing Co.	154 "	Rag sorters	28		
153	Cleveland Iron-ore Paint Co.	156 "	Paints and printers' ink	12	3	
154	Laganau Manufacturing Co.		General machinery	26		See No. 157.
155			Brass goods	40		
156			Iron roofing	20	14	
157			Light hardware	5		See No. 159.
158				10	5	

CLEVELAND—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
162	Union Elevator	Merwin street.	Grain elevator.	11			
163	Cleveland Milling Co.	113 Merwin street.	Flour and feed.	55			
164	Fulton Foundry	202 "	Steam and street railroad supplies.	45			See No. 164.
165	C. C. & I. R. R. Shops	Merwin street.	Railroad repairs.	300		6	" 165.
166	National Flour Mills.	255 Merwin street.	Flour and feed.	40	1	5	" 166.
167	A. Muehlhausen.	121 Columbus street.	Leather, etc.	25			
168	McMyler Manufacturing Co.	180 "	Steam derricks, etc.	60			
169	T. H. Baillock Bellows & Forge Co.	130 "	Bellows.	12	1		See No. 169.
170	Gibson & Price.	69-73 "	Bar and sheet lead, etc.	8			
171	American Bronze Works.	46-48 "	Journal bearings.	12		1	
172	Peter Gerlach & Co.	13-15 "	Saws and machinery.	40		4	
173	John Remesch.	30 "	Patterns.	5			
174	Dorner & Nolte.	32 "	Plows and cultivators.	3			
175	F. Zimmerman.	34-38 "	Moldings and picture frames.	50		25	See No. 175.
176	Industry File Works.	34 "	Files and rasps.	12		2	
177	Forest City Machine Works.	40-44 "	General machinery, etc.	12		3	See No. 177.
178	Excelsior Iron Works Co.	Columbus and Leonard streets.	General machine work.	100			" 178.
179	S. Fix's Sons.	Leonard and Winter streets.	Flue welding, etc.	6			
180	Clough & Witt.	" "	General machine work.	70			
181	Palmer & DeMooy.	" "	Gray iron castings.	165		3	See No. 181.
182	Gobelle Pattern Works.	" "	Stove and general patterns.	50	12		
183	W. R. Eynon & Co.	" "	Machinists' tools.	12			
184	J. H. Kippeneberg.	130 West street.	Wood turning.	4		1	See No. 184.
185	Arctic Ice Machine Co.	4-10 "	Ice machines.	78			
186	Cleveland Twist Drill Co.	24-26 "	Twist drills, etc.	60		20	See No. 186.
187	The Hughes Brewery.	15-21 "	Ale and porter.	6			
188	Bowler & Co.	14 Winter street.	Gray iron castings.	125		8	See No. 188.
189	The Worden Tool Co.	Fall street.	Railroad frogs and crossings.	20			
190	Forest City Brass Works.	Leonard and Winter streets.	Edge tools.	15		3	
191	The Standard Plating Works.	Fall and Leonard streets.	Brass foundry.	14		2	
192	F. Smeed & Co.	Fall street.	Nickel-plating.	83			
193	Ball, Cartwright & Co.	Fall and German streets.	Packing cases, etc.	4		8	See No. 193.
194	Ball City Box Factory.	" "	Packing cases.	44		2	" 194.
195	T. Hendrickson.	" "	Packing mill.	9		2	" 195.
196	Cleveland Lumber Oil Co.	" "	Limeed oil.	10			" 196.
197	T. W. Burnham.	French and Winter streets.	Grain elevator.	50	1		
198	The Cleveland Machinery Co.	Columbus and Leonard streets.	Machinery.	9			
199	Rogers & Son.	189 Leonard street.	Furniture.	60			See No. 200.
200	Buchan & Co.	Leonard and Hume streets.	Soap.	4			
201	River Blast Furnace.	19 Carter street.	Pig-iron.	175			See No. 202.

203	Potter, Birchall & Co.	7 Carter street	Planing mill	18	2	See No. 203.
204	Woods, Jenks & Co.	5 "	"	106	2	"
205	Maher & Brayton	20 "	General foundry work	140		
206	Riveride Foundry Works	26 "	Rolling mill castings	50		
207	R. J. Haynes & Co.	30 "	Foundry bolts	8		
208	Colwell & Collins	C. C. & I. R. R.	Carriage bodies, etc.	60	23	See No. 208.
209	The Upson Nut Co.	"	Nuts and washers	140	12	
210	The Hedges & Upson Co.	"	Bolts and nuts	350	75	See No. 210.
211	Standard Paint Co.	127-133 Scranton avenue	Paint	15	4	
212	Woodhill & O'Gorman	115 "	Architectural iron work	100	6	See No. 213.
213	Davidson & House	91-99 "	Doors, sash, blinds, etc.	25	5	
214	Variety Iron Works Co.	Scranton avenue	Switches, frogs and crossings	40	100	
215	George Faulhaber & Co.	335 Scranton avenue	Church furniture	300	2	See No. 217.
216	Lamson, Sessions & Co.	Scranton avenue	Bolts and nuts	175	8	
217	Standard Target Co.	Fairfield street	Flying targets	14		
218	The Variety Iron Works Co.	51 Scranton avenue	General machine work	65		
219	Forest City Chemical Co.	Walworth Run, near Scranton	Roofing materials	26	4	See No. 221.
220	Grief Brothers	284 Willey street	Cooperage	16		
221	James Davis	333 "	Soup	30		
222	Cleveland Target Co.	Willey street	Flying targets	16		
223	J. W. Fawcett & Co.	"	Burning and lubricating oils	16		
224	Kellogg & Jenkins	Howard Street	Packing house	30	2	
225	McArthur, Gilmore Foundry Co.	Pearl street	Gray iron castings	14		See No. 227.
226	A. Gairing	833 Pearl street	General machine work	16		
227	Walworth Run Foundry Co.	833 Express street	Petroleum products	45	2	
228	Cleveland Petrolatum Co.	769 Pearl street	Lager beer	50		
229	Oppman Brewing Co.	Willey and Columbus streets	Carriages and wagons	3		
230	Rausch & Lang Carriage Co.	683 Pearl street	Packing house	63		
231	The National Packing Co.	Mill street	Tallow products	13		
232	Thompson & Herrick	"	Lager beer	15		See No. 236.
233	Isaac Leisy	Vega avenue	"	12	1	
234	C. Schneider & Son	Train street	Furniture	5	2	
235	George V. Muth	8-10 Buckley street	Carriages and wagons	11	2	
236	West Side Furniture Co.	40-42 Orchard street	Wrought steel ranges	18		
237	Gustave Schaefer	911 Lorain street	Carriages and wagons	6	2	See No. 243.
238	G. A. Tinnermann	Lorain and Fulton streets	Paper boxes	18		
239	Bennhoff Brothers	650 Lorain street	Lager beer	4	2	
240	William Kenney	11 McLain street	General machinery	9		
241	C. H. Gehring Co.	Freeman and Pearl streets	Awning, tents, etc.	18		
242	River Machine Co.	171 River street	Sail makers	7	2	See No. 246.
243	J. & F. A. Wagner	167 "	General machinery	36	1	
244	Upson, Walton & Co.	161 "	Cigars	19	8	
245	John S. Oram	157 "	Gas fitting repairs	15		
246	M. M. Gleker	River street	Anhydrous ammonia	11		See No. 251.
247	Billings & Froelk	80 River street	Grain elevator	90	10	See No. 253.
248	Cleveland Gas Light & Coke Co.	72 "	Malt house	5	2	
249	Cleveland Automatic Refrigerating Co.	66 "	Moldings, etc.	6		
250	Otis Elevator Co.	5-9 River street	Printing and binding	5		
251	J. R. Smith	42-44 River street	Marble works	68		
252	J. R. Smith	Spring street	"			
253	Schaber, Reinthal & Co.	26-305 Spring street	"			
254	W. R. Smellie	323 "	"			
255	Cleveland Book Binding Co.	8 South Water street	"			
256	The Lyman-Strong Co.	269 West River street	"			

CLEVELAND—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
257	Larkin Rule Co.	275 West River street	Rules and tapes	13	5	6	
258	W. B. Cobb	279 " "	General machine work	10			
259	W. W. Brisbane	279 " "	Boiler-makers' tools, etc.	6			See No. 260.
260	Columbia Injector Co.	279 " "	Injectors, ejectors, etc.	6		2	
261	Carling & Co.	373 " "	Ale and porter	9			
262	Pearl Steam Laundry	171-175 Detroit street	Laundrying	11	18	3	See No. 262.
263	Auer & Pfeiffer	158 Detroit street	Carriages and wagons	7			
264	Cleveland Wheelbarrow Co.	140 " "	Wheelbarrows	5			See No. 264.
265	Forest City Crockery Co.	233 Pearl street	Crackers and cakes	19	11	1	See " 265.
266	J. Bucher's Brewery	529 " "	Lager beer	17			
267	Woods, Jenks & Co.	Stone's Levee and Second street	Planing mill	146		10	
268	Collister & Foster	Central Way and Eagle street	Sash, doors and blinds	54		4	See No. 268.
269	Taylor & Boggis Foundry Co.	65 Central Way	General iron foundry	200	20	20	" 269.
270	Meriam & Morgan Paramine Co.	Central Way and Ohio streets	Paraffine oils, wax, etc.	64		3	" 270.
271	Cleveland Iron Clad Paint Co.	75-77 Central Way	Iron clad paint	6			
272	M. J. Keller	125 " "	Church furniture	10			See No. 272.
273	Greif Brothers	135 " "	Cooperage	16		6	
274	H. B. Hunt	20 Hiko street	Tin and sheet iron works	10			See No. 274.
275	F. R. Newton	139 Central Way	Planing mill	106		6	" 275.
276	Johnston & Austin	176 " "	Window weights	30		2	" 276.
277	Wm. Wight	178 " "	Machine and smith works	6			
278	N. Y. L. E. & W. R. R. Shops	M. Div., N. Y. P. & O.	Railroad repairs	150	1	25	See No. 278.
279	Peck, Stow & Wilcox	Central Way and Cuyahoga street	General hardware	300	12	75	" 279.
280	John Nabuk	288 Central Way	Sash, doors, molding, etc.	32		2	" 280.
281	Saunders & Son	410 " "	Sash, doors, frames, etc.	10		2	" 281.
282	M. G. Brown & Co.	410 " "	Planing mill	8		2	" 282.
283	Fred. Hempy & Co.	132 Jefferson street	Packing cases	150	25	25	" 283.
284	Cleveland Paper Co.	Forest street	Paper	29	24	7	" 284.
285	J. J. Flick	178 Forest street	Sausage casings, etc.	13			See No. 286.
286	Joseph Marcs	46 Solan street	Furniture	7		4	
287	Grasselli Chemical Co.	Independence street	Chemicals	100			
288	Marsh & Harwood Co.	Central Way	Refrigerators	65		1	See No. 288.
289	Monroe Brothers	St. Lawrence street	Vegetable oils	80			
290	American Seed Oil Co.	Upper Central Way	Baskets and hoops	6		30	
291	Robert Manufacturing Co.	Ontario and Michigan streets	Paper boxes	60	4	6	
292	Forest City Paper Box Factory	81 Michigan street	Galvanized iron cornices	15			
293	Schackleton Brothers	81 " "	Gloves and whips	3	1		
294	Randall & Carter	49 " "	Experimental machinery	15			
295	Otto Konigsberg	24 " "	Carriages and wagons	20		3	See No. 296.
296	W. H. Gabriel	" "	Tin packages	20		7	
297	L. C. Beardsley & Co.	88 " "		50			

298	The Phoenix Paint Co.....	36 Michigan street	Paint.....	6	1	
299	M. M. Spangler.....	28 "	Malt house	8		
300	Rudolph & Lewis.....	29 "	Galvanized iron cornices, etc.	10		
301	Jacob Hoffman.....	32 "	Carrriages and wagons.....	12		
302	Thomas H. Bourke.....	28 "	General machine work.....	4		
303	G. S. Newcomb & Co.....	19 "	Printing.....	6		
304	Jos. A. Hoffrichter.....	3 "	Galvanized iron cornices, etc.	7		
305	City Machine Works.....	1-5 "	General machine work.....	25		
306	Crescent Manufacturing Co.....	3-5 "	Engineers' supplies.....	2		
307	P. Mueller & Co.....	21 Canal street.....	Malt house.....	11		See No. 318.
308	White Sewing Machine Co.....	1-40 "	Bottling works.....	400		
309	Rudolph Hohage.....	112 Champlain street.....	Galvanized iron cornices, etc.	4		
310	W. F. Carthaus.....	108 "	Bottling works.....	4		
311	T. J. Towson & Co.....	106 "	Carrriages and wagons.....	40		
312	G. W. & C. H. Heinsohn.....	102 "	Metal boxes, etc.....	19		
313	Brubn & Taggart.....	92-94 "	Wrought iron fences, etc.....	6		
314	Lithograph Tinware Co.....	88-90 "	Interior wood-work.....	30	5	See No. 314.
315	Dittman & Ewert.....	79 "	Japanning.....	3		See No. 316.
316	L. Richardson.....	34 "	Brass castings.....	3		
317	W. A. Jeavons.....	41 "	Steam dye works.....	5		See No. 319.
318	M. Love & Co.....	31 "	Brass castings.....	3		
319	A. Bichlmyer.....	25 "	Machinery, tools, etc.....	4		
320	Central Brass Foundry.....	21-23 "	Printing ink.....	16	2	
321	H. V. Hartz.....	21-23 "	Candles and lard oil.....	7		
322	Cleveland Printing Ink Works.....	17-19 "	Punches, shears, etc.....	14	2	
323	E. S. Coe & Co.....	11 "	Cigar boxes.....	4		See No. 325.
324	J. Knight.....	40 Long street.....	Umbrellas, parasols, etc.....	8	6	326.
325	Wm. Weber.....	Seneca and Long streets.....	Furnaces, ranges, etc.....	3	8	327.
326	George MacElwee.....	30-34 Long street.....	Printing.....	38	6	328.
327	F. & H. Born.....	Seneca and Long streets.....	Nickel-plating.....	21	4	
328	Mount & Co.....	" "	Book-binding.....	7	2	
329	Northern Ohio Nickel Plating Works.....	" "	Wood patterns.....	5		
330	J. J. Hoppinger.....	8 Champlain street.....	Furnaces, etc.....	2		
331	N. B. Dixon.....	48-50 Long street.....	Special machinery.....	4		
332	W. A. Smith & Co.....	9 Champlain street.....	Steam fitting.....	4		
333	Iris & Taylor.....	6 "	Vapor stoves.....	50		
334	Schafer & Becker.....	116 Canal street.....	Oxide gas.....	4		See No. 336.
335	American Vapor Stove Co.....	106 "	Brushes.....	2		337.
336	Cleveland Nitrous Oxide Works.....	104-106 "	Stave and barrel machinery.....	5	1	
337	L. C. Abraham Bros. & Co.....	104 "	Lubricators and oil cups.....	7		
338	A. M. Benson.....	104 "	Vapor stoves.....	5	2	
339	J. C. Reid.....	106 "	Carriage makers' supplies.....	4		
340	W. J. Hulbert & Co.....	106 "	General blacksmithing.....	10	4	
341	A. Kinderman.....	106 "	General machine work.....	5	5	
342	W. Lepper.....	104 "	Mill machinery.....	1		
343	Horsburg Brothers.....	106 "	Light hardware.....	3		
344	Kaufhold & Scott.....	106 "	Meat patterns.....	19	2	
345	Kaufhold & Scott.....	106 "	Stair builder.....	8		
346	Champion Safety Lock & Novelty Co.....	180 "	White and red leads.....	15		See No. 348.
347	C. Phell.....	100 Canal street.....	Paints.....	50		349.
348	F. Burmeister.....	108 "	Varnish.....	175	20	
349	Morley Lead Co.....	108 "		8		
350	Sherwin & Williams Co.....	100 Canal street.....				
351	George H. Kingstey.....	108 "				

CLEVELAND—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.		For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	
352	C. Burnside.....	352 Canal street.....	Tannery, etc.....	14		
353	J. Stafford & Sons.....	400 ".....	Soap.....	7		
354	Stoppel's Sons.....	Canal street.....	Lager beer.....	20		
355	Murphy & Co.....	569 Canal street.....	Varnishes.....	16	2	
356	R. C. Kobitz & Co.....	Broadway and Cross street.....	Rag sorters.....	4	25	
357	Cleveland Provision Co.....	Central Way.....	Packing house.....	125	8	
358	Valley R. R. Repair Shops.....	Valley R. R.....	Railroad repairs.....	60	1	See No. 358.
359	Cleveland Axle Manufacturing Co.....	694 Broadway.....	Axles.....	140	30	359.
360	Cleveland Paper Co.....	Broadway.....	Paper.....	78	15	360.
361	A. Pollock.....	45 Burwell street.....	Rag sorters.....	9	14	
362	Fitzsimmons & Co.....	638 Broadway.....	Shafting.....	15		
363	Phillips, Pink & Co.....	152 Scoville avenue.....	Tanners.....	24		
364	L. S. T. & Co.....	84 Burwell street.....	Rag sorters.....	9	40	
365	Smith & T. Padgett.....	".....	Boilers, etc.....	40		
366	Cleveland Paper Co.'s Machine Shop.....	".....	General machine work.....	22		
367	Cleveland Rolling Mill Co.....	Broadway.....	Blast furnaces.....	175		
368	Excelsior Steam Laundry.....	74 Frankfort street.....	Laundrying.....	2	9	See No. 368.
369	Sigler Brothers.....	74 ".....	Jewelers.....	2	1	369.
370	Cleveland Electrotype Foundry.....	74 ".....	Electrotyping.....	3	2	
371	Hiles & Coggeshall.....	74 ".....	Printing.....	9	4	
372	A. N. Fairbanks.....	74 ".....	Printers' rollers, etc.....	3	1	
373	Langman & Ruge.....	74 ".....	Shirts.....	75	3	
374	W. B. Davis & Co.....	74 ".....	Printing and publishing.....	22	4	
375	The Ohio Farmer.....	74 ".....	Brass goods.....	12	1	
376	H. C. Montgomery.....	35 ".....	Printing and binding.....	47	25	
377	J. B. Savage.....	67-67 ".....	Lithographing.....	5	1	
378	Johns & Co.....	74 ".....	Printing.....	4	1	
379	Whitworth Brothers.....	74 ".....	Gas stoves.....	16	4	See No. 380.
380	Van Wic Stove Co.....	74 ".....	Printing and binding.....	18	10	
381	Winn Brothers & Co.....	74 ".....	Brass goods.....	33	6	See No. 382.
382	Forest City Wire Mattress Co.....	Rear 115 1/2 ".....	Wire mattresses.....	4		
383	G. A. Pfaffmann.....	Rear 115 1/2 ".....	Vermicelli, etc.....	3		
384	Geo. A. Ford.....	Rear 115 1/2 ".....	General machine work.....	1		
385	Scheldigger Brothers.....	Rear 1-7 Water street.....	Brass castings.....	15	2	
386	Excelsior Knitting Works.....	10 Frankfort street.....	Hosiery and mittens.....	15	3	
387	Mayer & Co.....	Rear 115 1/2 Frankfort street.....	Hardwood-work.....	2	2	
388	Mercantile Manufacturing Co.....	1-3 Water street.....	Reclining chairs, etc.....	4		See No. 388.
389	Pierce & Chamberlain.....	17-19 Frankfort street.....	Shoes.....	17	4	" 389.
390	The Press.....	12-14 ".....	Printing and publishing.....	35	11	" 390.
391	Stuart & Schneider.....	61 Water street.....	Baking powder, etc.....	50	1	391.
392				2	1	

388	A. Witkowski.....	78 Water street.....	Pants, vests, etc.....	8	26	5	5	.....
389	Uimer Brothers.....	80 ".....	Pants, shirts, etc.....	5	10	5	.....	.....
390	Salsbury & Dunn.....	82-84 ".....	Parlor furniture, etc.....	9	.....	.....	.....	.....
391	Landesmann, Hershelmer & Co.....	Water and St. Clair streets.....	Ladies' and misses' garments.....	60	200	10	.....	.....
392	I. Stein.....	147 Water street.....	Hats and caps.....	5	15	.....	.....	.....
393	Forest City Paper Co.....	62-64 ".....	Rag sorters.....	5	27	.....	See No. 398.	.....
394	Vowle Brothers.....	68 ".....	Baking powder, etc.....	12	8	2	" 399.	.....
395	Spero & Wittman.....	70 ".....	Pants.....	3	3	.....	" 400.	.....
396	C. T. Helzel.....	111-113 ".....	Chewing gum.....	2	30	20	.....	.....
397	Cleveland Paper Box Factory.....	111-113 ".....	Paper boxes.....	2	30	2	.....	.....
398	J. Kraus & Son.....	133 ".....	Confectionery.....	3	2	.....	.....	.....
399	Enterprise Manufacturing Co.....	138-135 ".....	Pants, overalls, etc.....	3	2	.....	.....	.....
400	A. H. Kalms.....	121 ".....	Cigars.....	10	6	2	.....	.....
401	Rosenblatt Brothers.....	115 ".....	Pants, vests, etc.....	10	3	.....	.....	.....
402	Rosewater Brothers.....	111-113 ".....	Baking powder, etc.....	7	10	3	.....	.....
403	J. M. Weitz & Co.....	129 ".....	Boot and shoe uppers.....	5	5	1	.....	.....
404	George Mittinger.....	29 St. Clair street.....	Sheet-metal goods.....	5	5	.....	See No. 408.	.....
405	Stephen Commeny, Jr.....	105 Water street.....	Ottomans, etc.....	1	3	.....	.....	.....
406	Chas. Goodman.....	108 ".....	Misses' and children's cloaks.....	6	6	.....	.....	.....
407	Worswick Manufacturing Co.....	St. Clair and Water streets.....	Pipe fittings.....	64	.....	7	See No. 412.	.....
408	Cleveland Steam Laundry.....	109 Water street.....	Laundry.....	20	45	4	" 413.	.....
409	Lloyd & Keys.....	19-25 St. Clair street.....	Ale and porter.....	9	.....	.....	" 414.	.....
410	Miller Brothers' Paint and Varnish Co.....	St. Clair street.....	Pants.....	10	75	.....	" 415.	.....
411	John Anfield & Co.....	" and Seneca streets.....	Ladies' cloaks.....	17	3	1	.....	.....
412	Craig Baking Powder Co.....	134 St. Clair street.....	Baking powder, etc.....	6	3	.....	.....	.....
413	Stephens & Widler.....	108-110 ".....	Coffee and spices.....	40	.....	7	.....	.....
414	Koch, Goldsmith, Joseph & Co.....	73-77 ".....	Paper bags, etc.....	45	22	6	See No. 419.	.....
415	Well, Joseph & Co.....	63-71 ".....	Clothing.....	85	12	.....	" 420.	.....
416	Klein, Goodhart & Koch.....	68-72 ".....	Ladies' cloaks.....	15	100	.....	" 421.	.....
417	M. T. Silver & Co.....	64-66 ".....	Clothing.....	55	10	6	" 422.	.....
418	H. Freedman.....	60-62 ".....	Ladies' cloaks.....	9	75	.....	" 423.	.....
419	Malin & Co.....	68-70 ".....	Knit worsted goods.....	6	20	4	" 424.	.....
420	Amesger Publishing Co.....	134 ".....	Spool wire.....	8	75	25	" 425.	.....
421	H. H. Thorp Manufacturing Co.....	135 ".....	Printing and publishing.....	78	1	.....	.....	.....
422	Theo. C. Schenck & Co.....	147 ".....	Type foundry.....	24	6	2	.....	.....
423	Glick Brothers.....	135 ".....	Job printing.....	9	.....	5	.....	.....
424	William Publishing Co.....	143 ".....	Children's clothing.....	10	1	.....	.....	.....
425	Forest City Book-binding Co.....	145 ".....	Printing and publishing.....	25	10	8	.....	.....
426	A. Jacobs.....	143 ".....	Book-binding, etc.....	8	3	.....	.....	.....
427	Standard Tobacco and Cigar Co.....	St. Clair and Park streets.....	Shoes.....	25	20	3	.....	.....
428	Cleveland Electric Light Co.....	Rear 117 Public Square.....	Tobacco and cigars.....	150	150	25	See No. 433.	.....
429	Hart Manufacturing Co.....	".....	Electric light and power.....	20	.....	.....	" 434.	.....
430	Edwards Supply Manufacturing Co.....	".....	Machinists' tools.....	19	.....	.....	" 435.	.....
431	H. W. Lewis & Co.....	174 St. Clair street.....	Electric supplies.....	5	.....	2	.....	.....
432	Model Laundry.....	St. Clair and Wood streets.....	Stained glass.....	2	9	.....	.....	.....
433	C. E. Warner.....	St. Clair and Erie streets.....	Laundry.....	2	6	1	.....	.....
434	Cleveland Printing and Publishing Co.....	".....	Printing and publishing.....	40	5	4	.....	.....
435	Eastpee Electrotype and Engraving Co.....	".....	Electrotyping, etc.....	9	.....	.....	.....	.....
436	L. T. and F. D. Smith.....	".....	Sewing-machine needles.....	12	12	6	.....	.....
437	William Shake.....	".....	Book-binding.....	52	3	4	.....	.....
438	W. J. Morgan & Co.....	".....	Lithographs.....	2	2	.....	.....	.....
439	The Standard Tool Co.....	Rockwell and Bond streets.....	Twist drills, etc.....	30	6	25	.....	.....

CLEVELAND—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
447	Mehling Wagon Works.....	388 St. Clair street.	Carriages and wagons.....	6		1	
448	N. Hesel & Co.....	St. Clair and Erie streets	Confectionery.....	13	10	8	
449	Jacob Mall.....	9-11 Davenport street.	Lager beer.....	10			See No. 450.
450	Kuhlmann Brothers.....	488-490 St. Clair street.	Hard wood interiors, etc.....	15		5	" 451.
451	H. Beckenbach & Sons.....	316 " "	Furniture.....	19			" 452.
452	Lake Erie Mills.....	412 " "	Kiln-dried corn meal.....	3			" 453.
453	Cleveland Gas Fixture Man'g Co.....	Rockwell and Bond streets.	Gas fixtures.....	28		1	
454	Lake Shore Foundry.....	Foot of Alabama street.	General foundry work.....	325		4	
455	C. & P. R. R. Repair Shops.....	Lawrence street.	Railroad repairs.....	130		3	See No. 455.
456	L. S. & M. S. R. R. Car Shops.....	L. S. & M. S. R. R.	Railroad cars.....	157		17	" 456.
457	L. S. & M. S. R. R. Repair Shops.....	L. S. & M. S. R. R.	Railroad repairs.....	150		4	" 457.
458	T. H. Brooks & Co.....	708 Lake street.	Architectural iron work.....	6		10	" 458.
459	King Iron Bridge Manufacturing Co.....	Wason and Hamilton streets.	Iron bridges, etc.....	200		1	
460	Cross Bros. & Co.....	Lake and Wason streets	Gray iron castings.....	50		7	
461	Palmer Car Wheel Co.....	" "	Steel tire car wheels.....	45			
462	Excelsior Machine Works.....	Hamilton, near Case avenue	General machinery.....	22			
463	Avery Elevator Bucket Co.....	Wason and Lake streets	Steel elevator buckets.....	35		15	See No. 463.
464	Standard Carbon Co.....	Hamilton street	Carbon.....	180	11		" 464.
465	T. S. Balkwill.....	Hamilton, near Wason street.	Tacks, nails, etc.....	65		10	
466	Cleveland Manufacturing Co.....	Hamilton, near Case avenue	Patterns, etc.....	8			See No. 466.
467	The Jonathan Mill Manufacturing Co.....	Lake street and Case avenue	Iron forgings.....	400		10	" 467.
468	Cleveland City Forge and Iron Co.....	Lake and Belden streets	Mill machinery, etc.....	30		2	" 468.
469	Variety Iron Works Co.....	Lake and Belden streets	Boilers and bridges.....	75		4	
470	Billings and Taylor.....	Lake street and Case avenue	Paints and varnish.....	30	6		
471	Cleveland Hardware Co.....	Case avenue, near Lake street	General hardware.....	125	1	12	
472	The Ohio Carbon Co.....	Lake street, near Belden	Carbon.....	35			
473	The H. P. Nail Co.....	70 Case avenue	Wire nails.....	650	40	40	See No. 473.
474	Ohio Steel Barb Fence Co.....	Case avenue, near Lake street.	Steel barbed wire.....	30		20	" 474.
475	The Acme Machine Works.....	Hamilton, near Belden streets.	Boilers and general machinery.....	50			" 475.
476	Kilby Manufacturing Co.....	Hamilton, near Belden	Special and general machinery.....	5			
477	Brown Hauling & Conveying Mach. Co.....	Lake street, near Belden	Engineers and iron foundries.....	200		8	
478	City Foundry.....	Hamilton and Belden streets.	Holding machinery, etc.....	135			
479	Silver Metal Manufacturing Co.....	" near Bondy street.	General foundry work.....	30			
480	The American Wire Co.....	Margaret and Kirkland streets.	Silverware, etc.....	40	9	6	See No. 480.
481	W. S. Taylor Wire Works Co.....	St. Clair street	Rods and wire.....	550		15	
482	Thomas D. West Foundry Co.....	Wason " "	Wire goods.....	25	5	10	
483	Phoenix Iron Works.....	40 Wilson avenue	General foundry work.....	30			
484	The National Carbon Co.....	Lake Erie Iron Co.	Carbon machine " "	100	1	15	See No. 485.
485	Lake Erie Iron Co.....	Oxford street	Iron forgings, etc.....	40	40		" 486.
486	C. A. Krauss & Sons.....	139 Wason street	Planing mill.....	12		1	" 487.

488	The Lane Tool Co.	St. Clair and Hoody streets	Machinists' tools	3	80	5	See No. 493.
489	P. Huberty	571 St. Clair street	Bar furniture	3	80	5	See No. 493.
490	Union Steel Screw Works	Payne and Case avenues	Screws, tacks, etc	400	12	12	See No. 493.
491	The Brush Electric Co.	Belden and McHenry streets	Electric machines, etc	500	175	20	See No. 493.
492	The Schneider & Trenkamp Co.	Case avenue	Brass goods, etc	55	6	6	See No. 493.
493	Chisholm Steel Shovel Works	24 Cooper street	Shovels, spades, etc	4	8	8	See No. 493.
494	Cleveland Galvanizing Works	861-863 Wilson avenue	Galvanizing	45	10	10	See No. 493.
495	Excelsior Bread, Cake and Cracker Wks.	Windsor avenue	Bread, cakes, etc	27	1	4	See No. 496.
496	Herlig & Deerticks	"	Furniture	10	1	4	" 497.
497	Whitney, Raymond & Co.	1217-1221 Euclid avenue	Organs	30	3	6	
498	George J. Warden & Co.	Perkins avenue	Carriages	92	3	6	
499	The Standard Lighting Co.	Belden street	Vapor stoves, etc	19	19	4	
500	Swan Lamp Manufacturing Co.	1239 Euclid avenue	Incandescent electric lamps	20	6	6	
501	Henry H. Garrard	East Prospect street	Carriages	82	2	2	See No. 502.
502	Standard Ladder Works	C. & P. R., near Euclid avenue	Woodenware, etc	68	6	6	See No. 504.
503	Chandler & Price	East Prospect street	Printing presses	10	4	4	
504	Taylor & Boggs Foundry Co.	C. & P. R., near Euclid avenue	Foundry work	6	4	4	
505	The H. C. Tuck Co.	East Prospect street	Tacks, brads, etc	6	4	4	
506	W. H. La Fountaine & Co.	"	Carpet cleaning, etc	85	5	1	
507	George G. Ross	"	Matress springs, etc	85	5	1	
508	Warner & Swasey	C. & P. R., near Euclid avenue	Machine tools	30	3	6	
509	The Globe Carbon Co.	Garden street	Carbon	150	5	20	See No. 510.
510	Cleveland Co-operative Stove Co.	Cedar avenue and C. & P. R.	Stoves	250	6	20	" 511.
511	Standard Sewing Machine Co.	East Prospect street	Sewing machines	8	2	6	
512	Elliott & Dobbie	Garden street and C. & P. R.	Tacks and nails	3	8	3	
513	Stone Brothers	Garden street	Shoddies	11	65	515.	See No. 514.
514	G. M. Heard & Co.	Craw avenue	Nickel-plating	45	20	6	" 516.
515	National Safe and Lock Co.	South Dunham street	Safes, vaults, etc	85	1	30	" 517.
516	Cleveland Woolen Mills	East Prospect street	All-wool shoddies	190	4	4	See No. 519.
517	I. N. Topliff Manufacturing Co.	291 Quincy street	Carriage hardware, etc	12	6	6	
518	Fuller's Carpet Cleaning Works	Herald and Grand avenue	Carpet cleaning, etc	6	6	6	
519	Standard Foundry and M'fg Co.	Sherman street	Foundry work	12	6	6	
520	Miller Bros. Paint and Varnish Co.	C. & P. R. cross g. s. of Woodland ave.	Varnish, etc	6	6	6	
521	Glidden & Joy Varnish Co.	Giddings avenue	Paraffine wax	100	70	525.	See No. 525.
522	C. M. Mix	Rear 96 Stanton street	Oil cans	600	20	7	" 526.
523	Case & Van Orman	C. & P. R. cross g. near Woodland ave.	Iron fences, etc	20	6	7	
524	Van Dorn Iron Works	1234 East Madison avenue	Wash-basins	4	4	4	
525	Gorham & Sargent	C. & P. R. near Woodland avenue	Malleable iron castings	4	4	4	
526	Cleveland Nickelable Iron Co.	Herald street and Grand avenue	Nickel-plating	4	4	4	
527	Cleveland Nickel Works	Dell avenue	Street railway supplies	16	100	70	See No. 532.
528	Street Railway Supply Co.	10 Rockland avenue	Varnish	250	75	100	" 533.
529	Ohio Varnish Co.	Kinsman street	Burning oils	6	6	6	
530	Standard Oil Co.	14 Rockland avenue	Carriage and saddlery hardware	700	75	100	
531	The Cleveland Varnish Co.	Liebson and Lundy streets	Carriage goods	6	6	6	
532	The Cleveland Rubber Co.	C. & P. R. R.	Lubricating oils	15	15	15	
533	The Eberhard Manufacturing Co.	Kinsman street	Burning and lubricating oils	6	6	6	
534	Star Lubricating Oil Works	Bessmer avenue	Petroleum products	2	2	2	
535	Brooks Oil Co.	C. & P. R. near Kinsman street	Lubricating oils	35	35	35	
536	The Excelsior Refining Co.	Oppman street	Cooperage	11	11	11	See No. 539.
537	Standard Oil Co.	"	Lubricating oils, etc	350	4	4	
538	The Glend Oil Co.	Bessmer avenue	Bar iron				
539	A. M. Welt	Actna street					
540	The National Refining Co.						
541	Union Rolling Mill Co.						

CLEVELAND—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
542	Cleveland Diamond Fire-brick Co.	Actna street.	Fire-brick.	15			
543	W. H. Caine.	Warner Road and Broadway.	Sawed flanging.	20			
544	Thomas Wilson.	"	Flour and feed.	2			
545	David Round & Son.	2287 Broadway.	Heavy chains.	80			
546	Cleveland Refining Co.	Atlantic street and Bessemer avenue.	Lubricating oils, etc.	20			
547	Union Rolling Mill Co.	C. & P. and N. L. E. & W. R. R.	Pig iron.	75			
548	Samuel Woodhouse.	Union street.	Heavy chain.	4			
549	Standard Oil Co.	Tod street.	Lubricating oils.	200		15	
550	Schofield, Shurmer & Teagle.	Wilson avenue.	Lubricating oils, etc.	88			
551	Cantfield Oil Co.	"	Lubricating oils.	12			
552	Bowler & Co.	Bessemer avenue.	Car wheels.	60		3	See No. 552.
553	Killian Eggert.	Wilson avenue.	Cooperage.	40	18	3	" 553.
554	Excelsior Quilting Co.	18 Huron street.	Quilted lining, etc.	2	5	5	" 554.
555	J. H. Allen.	"	Shoes.	14	14	3	" 555.
556	C. Barker.	"	Bed springs.	6		3	" 556.
557	The Gabel & Frisby Co.	"	Mustard and spices.	5		10	" 557.
558	The Bell Scream Laundry.	"	Laundrying.	4		1	" 558.
559	Kershaw Brothers.	17	Light machinery.	2			
560	The Buckeye Car Seal Co.	17 1/2	Car seals.	3			
561	J. F. Louns.	18	Bed springs.	3	9	1	
562	F. H. Holton Rubber Works.	18	Druggists' supplies.	12	4		
563	Rosenheim & Manche.	120 Bank street.	Pants, overalls, etc.	5			See No. 563.
564	S. Kennard & Sons.	121-123	Shoes.	60	37	13	
565	V. Hausmann.	168	Furs, etc.	2	1		
566	Wm. Jackman.	178	Furs and fur trimmings.	3	3		
567	John Ernst.	178	Paper boxes.	3	4		
568	Smith & Curtiss.	194-196 Bank street.	Coffee and spices.	12			
569	B. Rohrlheimer & Son.	215-217	Cigars.	8	4		
570	Cleveland Plain Dealer.	225-227	Tobacco.	90	4	3	
571	Lake Erie Tobacco Co.	119	Flour sacks.	21	20	12	
572	Adams, Jewett & Co.	111-115 Bank street.	Straw goods.	12	4	6	See No. 572.
573	Comey & Johnson.	7-13 Academy street.	Boots and shoes.	20	115	12	" 573.
574	Adams & Ford.	111-115 Bank street.	Ladies' cloaks.	50	10		" 574.
575	The D. Black Cloth Co.	77-81	Ladies' cloaks.	75	250	3	" 575.
576	Legal and Commercial Publishing Co.	81, Clair and Bank streets.	Printing.	25	100	10	" 576.
577	Leam Smith & Co.	88 Seneca street.	Straw goods.	12		8	
578	H. Black & Co.	99 Bank street.	Tobacco.	10	50	6	
579	Cleveland Tobacco Works.	102-105 Bank street.	Ladies' cloaks.	26	75	3	
580	Thompson Manufacturing Co.	Between Gordon and Waverly avenue.	Iron roofing, etc.	15	9	12	
581	Vliet, Nutt & Co.	Barrett street.	Burning oils.	10			See No. 581.
582				10			

588	Walker Manufacturing Co.....	Breakwater and Waverly avenue.....	General machine work.....	225	20	
589	Merchants' Oil Co.....	Barrett street.....	Lubricating oils, etc.....	6		
590	Acme Grease and Oil Manufacturing Co.....	Breakwater and Waverly avenue.....	Clutch pulleys, etc.....	4		
591	Hill Clutch Works.....	Division and Rector streets.....	Boils and nuts.....	85	1	
592	Chapin Bolt and Nut Co.....	Sheriff street.....	Laundrying.....	45	15	See No. 587.
593	W. H. Garlock.....	885 Sheriff street.....	Time detectors.....	30	40	588.
594	Cleveland Electric Manufacturing Co.....	885 Sheriff street.....	Printing.....	6		
595	Clark Britton Printing Co.....	885-887 ".....	Light machinery.....	13		
596	F. E. Bright.....	Old River street.....	Iron and steel steamships.....	25	10	
597	Globe Iron Works Co.....	841-843 Sheriff street.....	Conveys, supporters, etc.....	850	12	
598	A. Williamson & Co.....	92 Seneca street.....	Engraving, etc.....	5	15	
599	J. H. Fishery & Co.....	92 Seneca street.....	Shoe uppers.....	3		
600	Forest City Upper Co.....	77-79 Michigan street.....	Stereotyping.....	2	2	
601	The Mail Plate Co.....	158-162 Brownell street.....	Carriages.....	1	1	
602	Stoll & Black.....	79 Boliver street.....	Tin, copper, sheet-iron work.....	18		
603	Wm. F. Hoffman.....	491 Erie street.....	Baking powder, etc.....	7		
604	J. Patterson.....	104 Ohio street.....	Cigar boxes.....	12		
605	A. T. Anderson.....	53 Parkman street.....	Building material.....	18	3	
606	Zipp & Schoenendorfer.....	14-18 ".....	Furniture.....	5		
607	L. Kickenberg.....	247 Broadway.....	Steel and iron.....	12		See No. 602.
608	George Counter.....	Seneca and Michigan streets.....	Printing.....	3600	20	" 603.
609	C. J. Herig.....	182-184 Seneca street.....	Cigar boxes.....	3	9	" 605.
610	The Standard Oil Co.....	Michigan and Seneca streets.....	Door locks, etc.....	22	5	
611	Cleveland Rolling Mill Co.....	Michigan and Seneca streets.....	Egg cases.....	30	1	
612	The Standard Oil Co.....	Calvert street.....	Carpet cleaning.....	8	5	
613	G. H. Mack & Co.....	Maywood street.....	Organs.....	4		See No. 610.
614	George H. Wilson.....	308 Garden street.....	Carriages and wagons.....	4		
615	Parkus Specialty Lark Co.....	13 Boliver street.....	Paper boxes.....	4	20	
616	Enterprise Egg Case Co.....	Calvert street.....	Builders.....	10		See No. 616.
617	Forest City Carpet Cleaning Works.....	20-28 Newton street.....	Builders material.....	45	3	" 617.
618	Jowett & Goodman Organ Co.....	139 Main street.....	Bar iron, etc.....	300	29	" 618.
619	Wahl & Thompson.....	159 Train street.....	Oil and corn meals.....	23	2	
620	M. Grossen Novelty Paper Box Fact'y.....	15 Pleasant street.....	Wool shoddes.....	75	275	
621	W. S. & Co.....	Clark avenue.....	Pork packing.....	15		See No. 621.
622	Lake Erie Iron Co.....	29 Pleasant street.....	Woolen goods.....	30	12	" 622.
623	Beckman Senior & Co.....	Broadway.....	Petroleum products.....	120	2	623.
624	The Standard Oil Co.....	822 Broadway.....	Lager beer.....	4		
625	C. Kaehrig.....	Perry and Cherry streets.....	Lubricating oils.....	4		
626	Goldstein & Sacheroff.....	8 Cherry street.....	Rag sorters.....	3	10	
627	Diebolt & Wehlein.....	Pittsburgh street.....	Lager beer.....	6		See No. 627.
628	Lattimer & Moore.....	Rear 1617 Wilson avenue.....	Contractors and builders.....	29	2	" 628.
629	Troy Steam Laundry.....	92 Sawtell avenue.....	Laundrying.....	9	18	
630	Frazier's Woodbine Laundry.....	Orange and Jackson streets.....	Carriages and wagons.....	7		
631	Wolman & Korell.....	Woodland avenue and Jackson street.....	Dyeing.....	20	1	
632	L. Englecke.....	430 Woodland avenue.....	Brushes.....	4	4	
633	O. O. Brush Works.....	20-22 Ocean street.....	Carriages and wagons.....	12	4	
634	Harm & Schuster.....	811-813 Woodland avenue.....	Street railroad cars.....	7		
635	Gruehl & Zillmer.....	1018 ".....		1		
636	Woodland Ave. Street Railroad Shops.....	961-963 ".....		13		

CLEVELAND—Continued.

Number.	Location.	Goods manufactured.	Employees.		For "Changes Ordered," see numerical arrangement following First District.
			Males.	Females.	
637	Likly, McDonald & Rockett.....	126 Superior street.....	80	2	See No. 637.
638	Short & Foreman.....	123 ".....	75	8	" 638.
639	Cleveland Clothing Factory.....	12 South Water street.....	3	20	" 639.
640	Ohio Knitting Co.....	633 Superior street.....	26	1	" 640.
641	Ohio Knitting Co.....	680 ".....	3	35	
642	Lehman & Richman.....	86-88 Water street.....	30	3	
643	C. F. Mulling & Co.....	Dodge and Superior streets.....	8		
644	Otis Iron & Steel Works.....	Lake and Lawrence streets.....	900	25	
645	Kentle & Strand.....	273 Ontario street.....	8	1	
646	G. W. Lewis & Co.....	Ohio street and Broadway.....	20	1	See No. 646.
647	W. Medlin.....	Pearl street.....	8	14	" 647.
648	Cleveland Knitting Mills.....	32-34 Woodland avenue.....	9	3	
649	C. Striebel.....	32 ".....	100	12	
650	P. B. House Evangelical Association.....	265-275 ".....	80	10	
651	L. Schlueter Brewing Co.....	Carroll and York streets.....	20	1	
652	Herman Junge.....	190-192 Bridge street.....	100	1	
653	Dangler Stove & Manufacturing Co.....	Vincent street.....	40	2	
654	A. N. Kellogg Newspaper Co.....	71-73 Seneca street.....	8	1	
655	The Clenden Manufacturing Co.....	71-73 ".....	8	1	
656	Thorpe-Gordon Press Co.....	71-73 ".....	8	1	
657	Cleveland Baking Co.....	Ontario street.....	30	3	See No. 657.
658	Eagle Steam Laundry.....	Vincent street.....	100	65	" 658.
659	Stirling & Co.....	10 Euclid avenue.....	26	9	
660	E. K. Reischmidt & Co.....	32 ".....	12	8	
661	The White Sewing Machine Co.....	57-59 ".....	32	27	
662	Strauss Brothers & Miller.....	Euclid avenue.....	71	30	
663	Ralph Cohen.....	96-98 Euclid avenue.....	2	15	
664	Crow & Whitmarsh.....	4-6 ".....	2	2	
665	Wm. Taylor Son & Co.....	120-126 Public Square.....	43	51	
666	Chandler & Rudd.....	116 ".....	26	14	
667	Cleveland Dry Goods Co.....	Ontario street.....	15	30	
668	H. M. Brown.....	146-150 Ontario street.....	4	18	
669	L. A. Bailey.....	13-15 Euclid avenue.....	8	17	
670	W. H. Quinby.....	45 ".....	75	10	
671	Harrington & McHenry.....	210 Superior street.....	60	30	
672	Boston Variety Store.....	33-35 Euclid avenue.....	2	2	
673	O. D. Mayer.....	283-286 Superior street.....	60	60	
674	Hoyer & Higbee.....	Seneca and Superior streets.....	2	2	
675	E. M. McMillen & Co.....	213 Detroit street.....	78	30	
676	L. Kohn.....	214-216 Superior street.....		15	
677	E. I. Baldwin, Hatch & Co.....				

678	J. Sykes	317 Pearl street	Dry goods store	2	3	See No. 678.
679	John Goetz	"	Millinery and fancy goods	35	15	5
680	John Meckes	551-555 "	Dry goods and notions	28	37	10
681	Fries & Schuele	575-581 "	Dry goods store	1	80	10
682	Adam Spring	643 Pearl street	"	2	2	
683	Dicker & Rose	993-994 Pearl street	"	5	12	3
684	T. W. Hunt	Pearl street and Walton avenue	Notions	6	4	
685	Haslam & Co.	218-220 Ontario street	Dry goods and millinery	13	15	5
686	Schedler & McWatters	517 Pearl street	Notions	7	18	See No. 686.
687	H. Grombacher	339 "	Fancy goods and millinery	10	4	687.
688	J. Cohen & Son	354 Ontario street	Millinery	7	3	
689	Mrs. F. A. Doering	378 "	Dry goods store	2	3	
690	L. Halle's Sons	585 Erie street	Dry goods and millinery	2	1	
691	A. F. Salzer	313 Woodland avenue	Dry goods store	1	1	
692	Hull & Alexander	"	Dry goods and millinery	1	1	
693	Stroehm & Ourl	"	Dry goods and millinery	1	1	
694	B. Hexter	1000 "	Dry goods store	1	1	
695	C. Molt	1391 "	"	1	1	
696	J. B. Ludrick	1415 "	"	1	1	
697	A. F. Salzer	969 "	"	1	1	
698	B. Hexter	463 "	Dry goods and millinery	1	1	
699	W. J. Ingram	376 Ontario street	Dry goods store	3	10	2
700	George Sinclair	2564 Broadway	"	1	4	
701	L. Sunda	1354 "	"	1	3	
702	Frank Karda	1390 "	"	1	3	
703	John Sinclair	2556 "	"	2	3	
704	H. E. Lewis	2570 "	"	3	4	1
705	R. Coulton	2584 "	"	3	3	1
706	L. Wagner & Co.	295-298 St. Clair street	Dry goods and notions	4	5	4
707	H. L. Tobben	2957 "	Dry goods store	2	1	
708	J. Coulton & Co.	1208 "	"	2	1	
709	W. T. Bell	726 "	"	2	4	1
710	W. T. Bell	1244 "	"	1	2	
711	M. Van Gastel & Co.	1218 Euclid avenue	"	1	2	
712	H. B. Higbee	982 Payne avenue	"	1	2	
713	W. T. Bell	978-980 "	"	1	2	
714	M. Van Gastel & Co.	482 Garden street	"	1	2	
715	Caleb Davies	280 "	"	1	2	
716	W. H. Rieh	243 "	"	1	2	
717	C. Smith	243 "	"	1	2	
718	Fath & Haker	225 "	"	1	2	

ERIE COUNTY.

SANDUSKY.

990	Germania Basket Co.	Melgs street	Baskets	18	14	12	See No. 991.
991	D. J. Brown & Co.	Anderson street	Hoops	42	1	3	" 992.
992	G. W. Iseman	Melgs and Washington streets	Saw mill	10			" 992.
993	Sandusky Tool Co.	Melgs street	Carpenters' tools, etc.	270		80	" 993.
994	Sandusky Brass Works	105 Jackson street	Brass goods	2			

SANDUSKY—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
995	J. W. Soncrant.....	114 Water street.....	Cooperage.....	14			
996	Kilbourn & Co.....	214 ".....	".....	25	1	1	
997	Barney & Kilby.....	Fulton and Water streets.....	General machinery.....	50			
998	Dan. Kunz.....	430 Water street.....	Marble Head lime.....	13			
999	B. & O. R. R. Co.....	B. & O. R. R.....	Grain elevator.....	25			
1000	J. T. Johnson & Co.....	Water street.....	Planing mill.....	5			
1001	A. Kunzman.....	".....	Carrriages.....	10			
1002	L. R. Johnston & Co.....	".....	Marble Head lime.....	12			
1003	The Ohlemacher Lime Co.....	".....	".....	25			
1004	Sandusky Machine & Agricultural Wks.....	212 ".....	General machinery.....	60		4	See No. 1004.
1005	Schoepfle & Stoune.....	Fulton and Water streets.....	Sash, doors and blinds.....	30		9	" 1005.
1006	Jay C. Butler & Co.....	Water street.....	Sash, doors, blinds, etc.....	100		18	" 1006.
1007	B. & O. R. R. Repair Shops.....	".....	Railroad repairs.....	121			" 1007.
1008	J. Kuebeler & Co.....	".....	Lager beer.....	28			
1009	Frank Stang.....	Tiffin avenue.....	".....	16			
1010	Anthony, Hig & Co.....	Kling street.....	".....	12			
1011	A. Schwehr.....	Harrison street.....	".....	7	14	14	
1012	Eureka Lumber Co.....	Water street.....	Cigar boxes.....	6		5	
1013	Mrs. H. Meriam.....	".....	Cigar box lumber.....	3			
1014	Sandusky Box Co.....	".....	General machinery.....	6			
1015	Woodsey Wheel Co.....	Fulton and Water streets.....	Planing mill.....	140		6	
1016	C. S. & G. R. R. Shops.....	Harrison street.....	Vehicle wheels.....	12			See No. 1016.
1017	The Sandusky Wheel Co.....	Water and McDonough streets.....	Railroad repairs.....	250		18	" 1017.
1018	R. B. Hubbard & Son.....	Water street.....	Planing mill.....	4		2	" 1018.
1019	Mackey & Merrick.....	".....	Ladders, tables, etc.....	8		2	" 1019.
1020	Lea & Herbert.....	812 ".....	Planing mill.....	5			" 1020.
1021	Hodgman Manufacturing Co.....	Foot of First street.....	Cooperage.....	125		10	
1022	Sandusky Paper Co.....	Shelby street.....	Paper.....	25		5	
1023	J. S. Cowdry.....	Hayes avenue.....	School crayons, etc.....	20	5	12	See No. 1023.

HANCOCK COUNTY.

FINDLAY.

1374	The Union Brass Co.....	Main street and Blanchard avenue.....	Brass goods.....	11		2	
1375	Findlay Woolen Mills.....	East Main street.....	Woolen goods.....	10	10	5	
1376	Bushon & Crawford.....	131-133 East Front street.....	Sash, doors, etc.....	9			See No. 1376.
1377	Palmer & Arnold.....	333 East street.....	Flour, etc.....	6			" 1377.

1378	Findlay Lumber and Wood-working Co.	Sandusky street.	Sash, doors, etc.	5	4	3	See No. 1378.
1379	W. H. Campbell & Son	East Main street.	General machine works	12			" 1379.
1380	The Eagle Machine Works.	202 East Front street.	Excelsior	4			
1381	A. Boehmer	East Main Cross street.	Handles	5			
1382	E. B. Hartwell	"	Table ware	8			
1383	The Columbia Glass Co.	T. C. & S. and L. E. & W. R. R.	Type writing machines	130	12	35	
1384	The Western Rapid Type Writer Co.	L. E. & W. R. R.	Architectural iron work	12			
1385	Geo. E. Gobrecht & Sons	Carnahan avenue.	Bar iron, etc.	14			
1386	Findlay Rolling Mill Co.	Briggs avenue and Factory street.	Window glass	100		13	See No. 1386.
1387	The Findlay Window Glass Co.	Walnut street.	Planing mill	110		3	" 1387.
1388	C. D. Hayward & Co.	T. C. & S. and L. E. & W. R. R.	Window glass	15			" 1388.
1389	Buckeye Window Glass Co.	L. E. & W. R. R.	Window glass	50			" 1389.
1390	The Findlay Iron and Steel Co.	Carnahan avenue.	Bar iron	120		6	" 1390.
1391	W. P. Dukas	High street.	Sash, doors, etc.	7			" 1391.
1392	The Bellaire Goblet Co.	Davis and Bolton streets.	Goblets, etc.	250	12	50	" 1392.
1393	Dalzell, Gilmore & Leighton Co.	Bolton street.	Table glassware	200	20	50	" 1393.
1394	Model Flint Glass Co.	Rockwell and Bolton streets	Crystal and colored glass.	150	7	35	" 1394.
1395	Findlay Clay Pot Co.	Bolton street.	Glass-house pots.	10			" 1395.
1396	Findlay Hydraulic Pressed Brick Co.	Sandusky street.	Pressed brick	100		15	" 1396.
1397	Findlay Stave and Handle Co.	Lima and North streets	Handles and heading	20		5	" 1397.
1398	Findlay Church Furniture Co.	Factory street.	Church room tables	9			" 1398.
1399	Findlay Table Manufacturing Co.	123 Factory street.	Sash, doors, etc.	60		3	" 1399.
1400	Vance & Bigelow	Lima avenue and Factory street	Lanterns, etc.	12			" 1400.
1401	Ohio Lantern Co.	Harrison and La Grange streets.	Castings	30	8	10	" 1401.
1402	Vinton, Jones & Werner	Lima avenue	Bee keepers' supplies	3			
1403	J. J. Bradner	Logan street	Chains	27		4	See No. 1403.
1404	David Round & Son	222 Crawford street	Sash, doors, etc.	32			" 1405.
1405	Shull & Parker	West Main Cross street	Tanks, etc.	27			" 1406.
1406	Funk and Latshaw	427 West Main Cross street	General machine work	5			" 1407.
1407	Adams Brothers	West Main Cross street.	Masks	35			
1408	American Mask Manufacturing Co.	418 West Putnam street.	Boilers	13	20	12	
1409	Findlay Iron and Boiler Works	West Main Cross street.	Grain elevator	20		2	
1410	Waltz, Barr & Co.	Hubbard street	Lamp chimneys	3			See No. 1410.
1411	The Lippencott Glass Co.	200-202 West Crawford street	Ironing tables, etc.	100		30	" 1411.
1412	John Shull Novelty Works	East Crawford and Mechanic streets.	Rakes	8			" 1412.
1413	McManness & Seymour	Blanchard street.	Window glass	19		12	" 1413.
1414	The Ohio Window Glass Co.	Mechanic and Crawford streets	Lined oil	50		4	
1415	McManness & Seymour	Blanchard street	Bottles, etc.	85			
1416	The Findlay Bottle Co.	Sandusky street	Flour, etc.	12		17	See No. 1416.
1417	David Kirk	T. C. & S. R. R.	Steel wire nails	125	3	8	" 1417.
1418	The Wetherald Wire Nail Co.	"	Oil well tools, etc.	8			" 1418.
1419	Ireland & McCoughroy	"	Window glass	52			
1420	The Hirsch-Ely Window Glass Co.	"					

HOLMES COUNTY.

MILLERSBURG.

1113	Gray & Adams	Planing mill	4			See No. 1113.
1114	Henry Snyder	Tile, etc.	8		4	" 1114.
1115	Maxwell, Reeder & Ponderne	Flour, etc.	10			" 1115.

HURON COUNTY.

BELLEVUE.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
1024	Joseph Erdreich		Cooperage	25			
1025	Fremont Cultivator Co.		Agricultural implements	55		6	See No. 1025.
1026	McLaughlin & Co.		Flour, etc.	13			" 1026.
1027	Gross & Weber		Planing mill	6			" 1027.

MONROEVILLE.

1028	Boehm & Yanquell		Flour, etc.	8			See No. 1028.
1029	Heymon & Co.		"	9			" 1029.
1030	S. E. Smith		Agricultural implements	6			" 1030.
1031	John Hosford		Panning mills	2			

NORWALK.

1032	G. M. Cleveland & Co.	Mill street	Flour, etc.	6			
1033	W. B. Lyke	Main street and Woodland avenue	General machinery	5			
1034	R. C. Carrington	"	Panning mills	2			
1035	E. S. Tuttle	Wooster street	Grain elevator	2			
1036	C. H. Gove & Co.	47	Iron foundry	3			
1037	Stewart Dowel Pin Works	Baker street	Dowel pins	12		5	
1038	The A. B. Chase Co.	Newton	Planes and organs	152		8	See No. 1038.
1039	L. S. & M. S. R. R. Shops	Whittelesey avenue	R. R. repairs	80		3	" 1039.
1040	W. & L. E. R. R.	W. & L. E. R.	"	96			" 1040.
1041	Norwalk Machine Works	Woodlawn avenue	General machinery	9			
1042	C. H. Fuller	Seminary street and Linwood avenue	Carriages	9			
1043	N. H. Pebbles	East	"	5			
1044	The Lanting Printing Co.	Woodlawn avenue	Printing	18	5	3	
1045	Norwalk Electric Light and Power Co.	East Seminary street	Electric light	3			
1046	S. E. Crawford	South Foster	Pumps	3			See No. 1046.
1047	Theodore Williams & Son	Woodlawn avenue	Flour, etc.	10			" 1047.
1048	D. E. Morehouse	Monroe street and Linwood avenue	Planing mill	5			" 1048.
1049	C. W. Smith	Water	Doors, sash, etc.	10			" 1049.
1050	Smith & Humberger	11 Main street	Dry goods store	8		2	" 1050.
1051	Kellum & Hall Bros.	14	"	3		5	
1052	A. C. Green			10			

1063	Hoyt & Co.....	17 Main street.....	Dry goods store.....	1	4		
1064	Boston Variety Store.....	".....	Notions, etc.....	10	6		
1065	B. C. Taber & Co.....	Whitelsey avenue and Main street.....	Dry goods store.....	7	14	2	
1066	F. B. Case.....	30 Main street.....	Tobacco.....	23	150	50	
1067	Sprague & French.....	".....	Advertising novelties.....	20			See No. 1058.
1068	The Hexagon Postal Box Mfg Co.....	Benedict avenue.....	Post-office furniture.....	6			" 1059.
1069	William Schubert.....	".....	Planing mill.....	8			" 1060.
1060	Bestwick & Burgess Manufacturing Co.....	Water street.....	Carpet sweepers, etc.....		30	15	

JEFFERSON COUNTY.

STUBENVILLE.

829	Hartje Brothers.....	C. & P. R. R.....	Glazed wrapping paper.....	20	5		
830	Ohio Valley Clay Co.....	High and Washington streets.....	Glass melting pots.....	30	8		
831	Jefferson Iron Works.....	Third street.....	Iron and nails.....	500		40	
832	Pearl Mills.....	West Market street.....	Flour and feed.....	6			See No. 832.
833	Sumner Glass Co.....	Near Pan Handle Depot.....	Bottles.....	95		45	
834	Gill Brothers & Co.....	Seventh street and Railroad.....	Lamp chimneys, etc.....	300	50	120	
835	Riverside Iron Works.....	Sixth avenue and Fourth street.....	Pig-iron.....	95			
836	James Means & Co.....	High and North streets.....	Foundry work, etc.....	30			
837	H. J. Beatty & Sons.....	South Third street.....	Table glassware.....	475	70	125	
838	Stuebenville Steam Laundry.....	Third and Washington streets.....	Laundrying.....	7	3		
839	Electric Light & Power Co.....	North High street bet. High and Third.....	Electric light.....	4			See No. 839.
840	Humphry Glass Co.....	Near Pan Handle R. R.....	Glass novelties.....	17	3	10	
841	Stuebenville Pottery Co.....	South street and Pan Handle R. R.....	Decorated ware, etc.....	115	50	10	
842	Cyrus Massie.....	South Sixth street.....	Doors, sash, etc.....	9			
843	Caswell & Pearce.....	Between Fourth and Fifth streets.....	Furniture.....	35			
844	W. L. Sharp & Son.....	416 Market street.....	Stoves, mantles, etc.....	55			
845	Robinson, Irwin & Co.....	Adams and Eighth streets.....	Machinery.....	5			
846	Robert Hyde.....	Near C. & P. R. R.....	Doors, sash, etc.....	6			See No. 846.
847	L. Anderson & Sons.....	".....	".....	15			
848	William McDowell.....	".....	Stairs and stair railings.....	4			

TORONTO.

849	Franeys Sons & Co.....	Near Railroad.....	Sewer pipe, etc.....	55			See No. 849.
850	Great Western Fire Clay Co.....	Near C. & P. R. R.....	".....	75			" 850.
851	Pennsylvania Mfg. Mining & Supply Co.....	Near Depot.....	Flour and feed.....	55			See No. 852.
852	Bowers & Custer.....	Near Railroad.....	Printing.....	3			
853	Toronto Tribune.....	Main street.....	Doors, sash, etc.....	4			
854	Myers & McFarren.....	Near C. & P. R. R.....	".....	8			
855	Medcalf, Cooper & Goodlin.....	Near Depot.....	".....	12			

LORAIN COUNTY.

LOBAIN.

965	Lorain Wrench Co.....		Wrenches.....	16		3	See No. 965.
966	Lorain Novelty Co.....		Automatic door stops.....	8		4	" 966.

LORAIN—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
967	Lorain Lumber and Manufacturing Co.		Planing mill	7			See No. 967.
968	C. L. & W. R. R. Car Shops		Railroad car repairs	87			" 968.
969	The United Brass Co.		Plumbers' supplies, etc.	275	30	25	" 969.
970	Williams, Barrows & Co.		Flour and feed	6			
971	C. L. & W. R. R. Shops		Railroad repairs	125		5	

ELYRIA.

979	Ohio Co-operative Shear Co.	Lake avenue	Shears	50		10	
980	Henry Copas	Elyria	Road machines, etc.	4			
981	C. W. Fletcher Bottling Co.	Washington avenue	Bottling works	6			
982	Thomas Lumbering	West avenue	General machinery	8			
983	L. S. & M. S. R. R.	Mill street	Carrriage hardware, etc.	40		4	See No. 983.
984	C. Topliff & Ely Co.	Mill street	Planing mill	16		2	" 984.
985	J. W. Hart	Pine street and East avenue		15		2	" 985.
986	Elyria Canning Co.	River street	Canned goods	12	100	8	" 986.
987	Western Automatic Machine Screw Co.	Lake avenue	Machine screws	70			" 987.
988	G. Reublin	136 Broad street	Flour and feed	8			
989	Ross & Ingersoll	40 Broad street	General machinery				

LUCAS COUNTY.

TOLEDO.

1196	George Mathels.	829 Water street	Fire-escapes, etc.	2			
1197	Toledo Block Works	511 "	Pulley blocks, etc.	11			
1198	Toledo Display Horse Co.	418 "	Display horses	5			
1199	Shoup & Trudicoll	829 "	Boilers	10			
1200	Stevens Filter Co.	Water street	Filters	10			
1201	F. N. Quale	"	Grain elevator	15			
1202	Enterprise Machine Co.	Foot of Monroe street	General machine work	7			
1203	W. H. Birkenkamp & Co.	"	Trunks, etc.	6			
1204	The Conant Brothers	Water and Adams streets	Furniture	60	2	10	See No. 1204.
1205	Witker Manufacturing Co.	Water and Oak streets	Sash, doors and blinds	72		15	" 1205.
1206	The Ricard Iron Wheel and Novelty Co.	232 Cherry street	Iron wheels	11		1	

1207	W. H. Harrison.....	24 Lynn street.....	Tobacco.....	5	4		
1208	Bechtel, Carney & Co.....	Water street.....	Flour, etc.....	8			
1209	W. H. H. Smith & Co.....	720 ".....	Saw and latb mill.....	45	12		
1210	W. H. H. Smith & Co.....	711 ".....	Planing mill.....	6			
1211	Toledo Foundry and Machine Co.....	Cherry and Water streets.....	Engines, excavators, etc.....	70			
1212	Riehard & Ricard.....	723-774 Water street.....	Machine work, etc.....	20			
1213	Western Manufacturing Co.....	Water and Vine streets.....	Sash, doors and blinds.....	60	10	See No. 1213.	
1214	J. V. Sandusky.....	15-27 Vine street.....	Furniture.....	47	5	" 1214.	
1215	J. V. Sandusky.....	Vine street.....	Sash, doors and blinds.....	25		" 1215.	
1216	George Waldvogel.....	St. Clair and Oak streets.....	Upholstering.....	11	4		
1217	J. B. Bortz.....	St. Clair street.....	Rag sorting.....	5	15	3	
1218	Lock & Trowbridge.....	Water and La Grange streets.....	General machine work.....	20			
1219	Vulcan Foundry and Machine Co.....	214-216 Forest street.....	Gray iron castings.....	60	4		
1220	Eagle Foundry.....	221 Walnut street.....	Furniture.....	13		See No. 1221.	
1221	T. J. Collins & Co.....	Water and La Grange streets.....	Carriage wood work.....	13		1222.	
1222	Toledo Carriage Wood-work Co.....	St. Clair and Oak streets.....	Hosiery and mittens.....	22	150	" 1223.	
1223	Roth & Freedman.....	Locust and Summit streets.....	Mouldings, etc.....	20	2	" 1224.	
1224	W. O. Brown & Son.....	St. Clair and Orange streets.....	Pork packing.....	11		" 1225.	
1225	Leland Smith & Co.....	144-146 St. Clair street.....	Cigars.....	36	6		
1226	The B. F. Wade Co.....	Jefferson and St. Clair streets.....	Printing and binding.....	9	4		
1227	Union Paper Box Co.....	429 St. Clair street.....	Printer boxes.....	4	12	2	
1228	I. S. Bortz & Co.....	St. Clair street.....	Bustles.....	1			
1229	The Toledo Electric Co.....	432-434 St. Clair street.....	Electric light.....	20		See No. 1230.	
1230	Variety Spring & Machine Works.....	431 ".....	General machine work.....	11		" 1231.	
1231	F. C. Shaw & Co.....	432 ".....	Clothing.....	3	50	" 1232.	
1232	W. C. Kirk & Bigelow.....	441 ".....	Crackers, etc.....	22	1	" 1233.	
1233	Blake Printing & Paper Co.....	442 ".....	Printing, etc.....	64	29	" 1234.	
1234	Buckeye Steam Laundry.....	326-128 ".....	Laundrying.....	2	11		
1235	George Lorenze.....	31 ".....	Perfumes.....	2	2		
1236	The Goulet Manufacturing Co.....	124 ".....	Sash, doors, etc.....	40	5	See No. 1237.	
1237	A. Mertz.....	St. Clair street.....	Saws.....	5		" 1238.	
1238	Shaw, Kendall & Co.....	8 South St. Clair street.....	General machinery, etc.....	150	6	" 1239.	
1239	H. E. Davis.....	1-9 St. Clair street.....	Cigar boxes.....	2	3		
1240	H. Bartley.....	14-16 ".....	Saws.....	2	2		
1241	John Shaw.....	8 ".....	Brass castings.....	5			
1242	C. H. Moore.....	6 ".....	Edge tools.....	3			
1243	Ed. McLeary.....	2-4 ".....	General machinery.....	6			
1244	Y. Seeger.....	15 ".....	Brass goods.....	8	2		
1245	J. L. Griswell.....	Washington and St. Clair streets.....	Galvanized iron cornice.....	61	5		
1246	F. N. Quale.....	Mill street.....	Flour, etc.....	15		See No. 1247.	
1247	The Toledo Bolt & Nut Co.....	600 Seagar street.....	Bolts and nuts.....	100	40	1248.	
1248	McConnell & Co.....	502 St. Clair street.....	Flour, etc.....	16		" 1249.	
1249	Diamond Planing Mill Co.....	St. Clair and Clayton streets.....	Sash, doors, etc.....	55	4	" 1250.	
1250	Wm. Peter.....	197 South St. Clair street.....	Sash ".....	25	25	" 1251.	
1251	Erle Street Planing Mill.....	416 Erie street.....	Planing mill.....	28	2	" 1252.	
1252	Grassier & Brand Brewing Co.....	Williams and St. Clair streets.....	Lager beer.....	40			
1253	Toledo Pump Co.....	117 Maumee avenue.....	Pumps.....	15			
1254	H. B. Milmine & Co.....	Field and Segur avenue.....	Foundry work.....	100	2		
1255	R. F. Russell.....	Erie street.....	Planing mill.....	10			
1256	Geo. W. Thomas & Co.....	41-45 Hamilton street.....	Wheelbarrows.....	35		See No. 1257.	
1257	Herbert Baker.....	399 Erie street.....	Foundry work, etc.....	65	8	" 1258.	
1258	Tillinghast & Co.....	559 ".....	Saws.....	10		" 1259.	
1259	The C. H. Schroeder & Co.....	328 ".....	Sash, doors, etc.....	70	12	" 1260.	

Lorain—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
967	Lorain Lumber and Manufacturing Co.		Planing mill	7			See No. 967.
968	C. L. & W. R. Car Shops		Railroad car repairs	97			" 968.
969	The United Brass Co.		Plumbers' supplies, etc.	275	30	25	" 969.
970	Williams, Barrows & Co.		Flour and feed	6			
971	C. L. & W. R. Shops		Railroad repairs	125		5	

ELYRIA.

979	Ohio Co-operative Shear Co.	Lake avenue	Shears	50		10	
980	Henry Copas	Elyria	Road machines, etc.	4			
981	C. W. Plotcher Bottling Co.	Washington avenue	Bottling works	4			
982	Thomas Armstrong	West avenue	General machinery	3			
983	The Toppliff & Ely Co.	L. S. & M. S. R. R.	Carriage hardware, etc.	40		4	See No. 983.
984	C. Parsch	Mill street	Planing mill	16		2	" 984.
985	J. W. Hart	Pine street and East avenue	Planing	15		2	" 985.
986	Elyria Canning Co.	River street	Canned goods	12	100	35	" 986.
987	Western Automatic Machine Screw Co.	Lake avenue	Machine screws	70		8	" 987.
988	G. Reublin	136 Broad street	Flour and feed	3			
989	Ross & Ingersoll	40 Broad street	General machinery	8			

LUCAS COUNTY.

TOLEDO.

1196	George Matheis	329 Water street	Fire-escapes, etc.	2			
1197	Toledo Block Works	511 "	Pulley blocks, etc.	11			
1198	Toledo Display Horse Co.	418 "	Display horses	5			
1199	Shoup & Truicon	329 "	Rollers	10			
1200	Stevens Filter Co.	Water street	Filters	10			
1201	F. N. Quale	"	Grain elevator	15			
1202	Enterprise Machine Co.	Foot of Monroe street	General machine work	7			
1203	W. H. Birkenkamp & Co.	Foot of "	Trunks, etc.	6			
1204	The Conant Brothers	Water and Adams streets	Furniture	60	2		See No. 1204.
1205	Witker Manufacturing Co.	Water and Oak streets	Sash, doors and blinds	72		10	" 1205.
1206	The Ricard Iron Wheel and Novelty Co.	232 Cherry street	Iron wheels	11		1	

1207	W. H. Harrison.....	24 Lynn street.....	Tobacco.....	5	4	.....	1200
1208	Bechtel, Carney & Co.....	229 ".....	Flour, etc.....	8	.....	.....	1201
1209	W. H. Smith & Co.....	Water street.....	Saw and latb mill.....	45	12	.....	1202
1210	W. H. Smith & Co.....	711 ".....	Planing mill.....	6	.....	.....	1203
1211	Toledo Foundry and Machine Co.....	Cherry and Water streets.....	Engines, excavators, etc.....	70	.....	.....	1204
1212	Riehard & Riard.....	732-774 Water street.....	Machine work, etc.....	20	.....	.....	1205
1213	Western Manufacturing Co.....	Water and Vine streets.....	Sash, doors and blinds.....	60	10	See No. 1213.	1206
1214	The Schauss Manufacturing Co.....	15-27 Vine street.....	Furniture.....	47	5	" 1214.	1207
1215	J. V. Sandeef.....	Vine street.....	Sash, doors and blinds.....	25	.....	" 1215.	1208
1216	George Waldvogel.....	St. Clair and Oak streets.....	Upholstering.....	11	1	.....	1209
1217	J. B. Bortz.....	St. Clair street.....	Rag sorting.....	5	15	.....	1210
1218	Lock & Trovbridge.....	611 ".....	Lithographing.....	20	3	.....	1211
1219	Vulcan Foundry and Machine Co.....	Water and La Grange streets.....	General machine work.....	60	4	.....	1212
1220	Eagle Foundry.....	214-216 Locust street.....	Gray iron castings.....	15	.....	See No. 1221.	1213
1221	T. J. Collins & Co.....	221 Walnut street.....	Furniture.....	22	150	" 1222.	1214
1222	Toledo Carriage Wood-work Co.....	Water and La Grange streets.....	Carriage wood work.....	30	25	" 1223.	1215
1223	Roth & Friedman.....	St. Clair and Oak streets.....	Mouldings, etc.....	20	2	" 1224.	1216
1224	W. O. Brown & Son.....	Locust and Summit streets.....	Hosiery and mittens.....	11	.....	" 1225.	1217
1225	Leland Smith & Co.....	144-146 St. Clair street.....	Cigars.....	30	6	.....	1218
1226	The B. F. Wade Co.....	Jefferson and St. Clair streets.....	Pork packing.....	36	9	.....	1219
1227	L. S. Bortree & Co.....	428 St. Clair street.....	Printing and binding.....	4	12	.....	1220
1228	U. B. Paper Box Co.....	St. Clair street.....	Electric light.....	20	.....	See No. 1220.	1221
1229	The Toledo Electric Co.....	432-434 St. Clair street.....	General machine work.....	11	50	" 1221.	1222
1230	Variety Spring & Machine Works.....	431 ".....	Clothing.....	3	.....	" 1222.	1223
1231	E. C. Shaw & Co.....	432 ".....	Crackers, etc.....	22	1	" 1223.	1224
1232	Worke, Kirk & Bigelow.....	441 ".....	Printing, etc.....	64	6	" 1224.	1225
1233	Blade Printing & Paper Co.....	128-128 ".....	Laundrying.....	2	11	.....	1226
1234	Buckeye Steam Laundry.....	31 ".....	Perfumes.....	2	2	.....	1227
1235	George Lorenze.....	124 ".....	Sash, doors, etc.....	40	5	See No. 1227.	1228
1236	The Goulet Manufacturing Co.....	St. Clair street.....	General machinery, etc.....	190	6	" 1228.	1229
1237	A. Mertz.....	8 South St. Clair street.....	Cigar boxes.....	2	3	" 1229.	1230
1238	Shaw, Kendall & Co.....	1-9 St. Clair street.....	Saws.....	2	.....	.....	1231
1239	H. E. Davis.....	14-16 ".....	Brass castings.....	5	.....	.....	1232
1240	H. Bartley.....	12 ".....	Edge tools.....	3	.....	.....	1233
1241	John Shaw.....	8 ".....	General machinery.....	6	.....	.....	1234
1242	C. H. Moore.....	6 ".....	Brass goods.....	8	2	.....	1235
1243	C. H. Moore.....	2-4 ".....	Galvanized iron cornice.....	15	.....	See No. 1247.	1236
1244	Ed. McLeary.....	15 ".....	Flour, etc.....	61	5	" 1248.	1237
1245	V. Seeger.....	Washington and St. Clair streets.....	Bolts and nuts.....	100	40	" 1249.	1238
1246	J. L. Criswell.....	Mill street.....	Flour, etc.....	16	.....	" 1250.	1239
1247	F. N. Quile.....	600 Seegar street.....	Sash, doors, etc.....	55	4	" 1251.	1240
1248	The Toledo Bolt & Nut Co.....	502 St. Clair street.....	Planing mill.....	25	25	" 1252.	1241
1249	McConnell & Co.....	St. Clair and Clay street.....	Lager beer.....	28	.....	.....	1242
1250	Diamond Planing Mill Co.....	197 South St. Clair street.....	Pumps.....	15	.....	.....	1243
1251	Wm. Peter.....	416 Erie street.....	Foundry work.....	100	2	.....	1244
1252	Grasser & Bramp Co.....	Williams and St. Clair streets.....	Planing mill.....	35	.....	See No. 1257.	1245
1253	Toledo Pump Co.....	117 Maumee avenue.....	Wheelbarrows.....	65	8	" 1258.	1246
1254	H. B. Milline & Co.....	Field and Segur avenue.....	Saws.....	10	.....	" 1259.	1247
1255	R. F. Russell.....	Erie street.....	Sash, doors, etc.....	70	12	" 1260.	1248
1256	Geo. W. Thomas & Co.....	41-45 Hamilton street.....	.....	.....	.....	.....	1249
1257	Herbert Baker.....	339 Erie street.....	.....	.....	.....	.....	1250
1258	Tillinghast & Co.....	559 ".....	.....	.....	.....	.....	1251
1259	The C. H. Schroeder & Co.....	328 ".....	.....	.....	.....	.....	1252

TOLEDO—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
1261	The N. Houghton Foundry & Machine Co.	118-130 South Huron street	Foundry work, etc.	30		3	
1262	Adam Loos.	13 Erie street	Steam boilers	7			
1263	Toledo Brewing & Mailing Co.	Hamilton street	Lager beer	60			
1264	The Union Manufacturing Co.	Bismark and Hamilton streets	Sewing machines, etc.	100	1	25	See No. 1264.
1265	Buckeye Paint & Varnish Co.	Lucas and Fifteenth streets.	Paints	11			" 1265.
1266	George Wilson & Sons.	15 Lucas street	Boxes	30			" 1266.
1267	S. W. Bell & Co.	Lucas and Fifteenth streets.	Soups	7			
1268	Thompson & Chute	201 Lucas street	Refrigerators, etc.	30		3	
1269	B. A. Stevens.	Eric and Lucas streets.	Sash, doors, etc.	75		4	See No. 1269.
1270	John S. Eck & Co.	111 Superior street.	Iron wheels, etc.	40		2	" 1270.
1271	Union Foundry Co.	14 Huron street.	Traveling bags	25			
1272	John Shepler.	Huron street.	Boxes.	4	1		
1273	John Shepler.	507 Superior street.	Tin packages.	13		1	See No. 1273.
1274	E. P. Breckenridge.	Superior and Oak streets	Cigar boxes.	25	50	35	
1275	J. Nagely.	Oak and Superior streets	Elevators, etc.	5	10		
1276	Smith & Halderman.	" "	Coffee and spices.	80			
1277	The Woolson Spice Co.	430 Superior street.	Tinware	100	150	25	
1278	Toledo Knitting Co.	Erie and Orange streets	Knit goods.	1	80	15	See No. 1278.
1279	Toledo Tinware Co.	Bush and Champlain streets	Lager beer.	25	10		
1280	Buckeye Brewing Co.	712 Bush street.	Cooperage	54			
1281	Mueller Brothers	Oak and Huron streets	Cloaks	6	125	15	See No. 1282.
1282	A. Black & Co.	Chestnut and Champlain streets	Picture frames, etc.	20	40	40	" 1283.
1283	The Toledo Moulding Co.	Superior and Orange streets.	Children's carriages.	140	12	12	" 1284.
1284	The Gendron Iron Wheel Co.	201 Empire street	Tobacco palls	189	12		" 1285.
1285	Toledo Tobacco Pull Factory	314 Pearl	Laundry	25	4	1	
1286	Pearl Steam Laundry	Cherry and Huron streets.	Tinware	13	4		
1287	Model Steam Laundry	719 Michigan street.	Bottling	10		1	
1288	Stollberg, Clapp & Briggs	725 "	Lager beer.	13			
1289	City Bottling Works.	527 State street.	Rag sorting.	13	5		
1290	Eagle Brewing Co.	Adams and Eleventh streets.	Marble work, etc.	2			
1291	Goldburg & Jacobson.	713 Adams street.	Bottling.	10		2	
1292	Lloyd Brothers	Albion street	Pins	11	25	5	
1293	The Hoppe & Strub Bottling Co.	3655 Monroe street.	Linseed oil	24			
1294	The Great Western Pin Co.	Monroe street	Carriages, etc.	35	5	2	See No. 1296.
1295	Metzger Brothers & Co.	Albion	Cots, wringers, etc.	50	10	6	" 1297.
1296	C. Z. Kroh & Co.	" "	Axles.	10			" 1298.
1297	Toledo Axle Co.	Bancroft "	Iron wheels, etc.	35	5	2	" 1299.
1298	Tubular Cot & Winger Manufacturing Co.	C, H. & D. R. R.	General bridge work.	85			
1299	The Harris Metal Works	" "	Railroad cars.	70	1		
1300	The Smith Bridge Co.	" "	" "	"	"	"	"
1301	The Consolidated Rolling Stock Co.	" "	" "	"	"	"	"

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MAHONING COUNTY.

YOUNGSTOWN.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
1421	Brown, Bonnell & Co.	Champion and Bayne streets	Merchant iron	1,800		70	See No. 1421.
1422	The Arms Bell Co.	Foot of South Market street	Bolts and nuts	125	7	50	
1423	Enterprise Boiler Works	South Market street	Steam boilers, etc	21		5	
1424	William B. Pollock & Co.	"	"	50		5	
1425	William Tod & Co.	South Phelps street	Engines, etc	90		2	
1426	The Youngstown Carriage Mfg Co.	Boardman and Hazel streets	Carriages, etc	90		3	
1427	Heller Bros.	South Market street	Doors, sash, etc	15		1	
1428	The Lloyd Booth Co.	" Phelps	Foundry and machine work	41			See No. 1427.
1429	Homer Baldwin	Mill street	Flour, etc	10			" 1428.
1430	George Turner	31 Holmes street	Iron fencing	8			
1431	Youngstown stamping Co.	301 East Boardman street	Tinware	45	45	12	
1432	George Dingledy	Basin street	Planing mill	30		2	
1433	Forysth Scale Co.	Boardman street	U. S. Standard Scales	20		3	See No. 1433.
1434	A. S. Williams	Basin street	Sash, doors, etc	60			" 1434.
1435	Hem Rod Furnace	390 East Federal street	Pig iron	10		3	" 1435.
1436	Youngstown Lumber Co.	39-35 North Watt street	Planing mill	30			" 1436.
1437	Youngstown Stove Mfg Co.	"	Stoves	250		75	
1438	Youngstown Rolling Mill Co.	"	Merchant iron	550		85	
1439	Cartwright, McCurdy & Co.	Moon street	Ale, beer, etc	20			
1440	John Smith's Sons	513 West Federal street	Laundry	3	9		See No. 1441.
1441	Youngstown Steam Laundry	216 East	Pig iron	175			" 1442.
1442	Brier Hill Iron and Coal Co.	Brier Hill	Washed iron	50			" 1443.
1443	Youngstown Steel Co.	"	Flour, etc	12			" 1444.
1444	Homer Baldwin	Market and Wick streets	Merchant iron	1155		110	" 1445.
1445	Mahoning Valley Iron Co.	Valley street	"			20	" 1446.
1446	American Tube and Iron Co.	Poland road	Wrought iron pipes, etc	400	1		

HAZELTON.

1447	The Andrews Bros. Co.		Merchant iron	500		35	See No. 1448.
1448	Youngstown Car Manufacturing Co.		Railroad cars	125		6	

MEDINA COUNTY.

MEDINA.

972	B. H. Brown & Co.....	.....	.....	.....	Planing mill.....	13	1	.....
973	A. B. Bishop.....	.....	.....	.....	Carriages and wagons.....	6	.....	.....
974	George Weber & Co.....	.....	.....	.....	Stove hollow-ware.....	25	.....	.....
975	A. I. Root.....	.....	.....	.....	Ice supplies.....	40	6	See No. 975.
976	Medina Carriage Co.....	.....	.....	.....	Carriages and wagons.....	4	.....	.....
977	Hickox Brothers.....	.....	.....	.....	Planing mill.....	3	.....	.....
978	O. C. Shepard.....	.....	.....	.....	Flour and feed.....	3	.....	.....

RICHLAND COUNTY.

MANSFIELD.

1061	Larabee Manufacturing Co.....	.....	.....	.....	Vehicle chafe irons.....	10	2	.....
1062	The Bodine Roofing Co.....	.....	.....	.....	Roofing material.....	6	1	.....
1063	E. J. Forney & Co.....	.....	.....	.....	Linseed oil.....	9	.....	.....
1064	Jacob Cline.....	.....	.....	.....	Cooperage.....	18	.....	.....
1065	Blessman & Co.....	.....	.....	.....	Coffee, spices, etc.....	14	2	.....
1066	Union Foundry & Machine Co.....	.....	.....	.....	General machinery.....	12	.....	.....
1067	Gilbert, Waugh & Co.....	.....	.....	.....	Flour, etc.....	15	.....	.....
1068	The Hicks-Brown Co.....	.....	.....	.....	Cooperage.....	14	.....	.....
1069	Mansfield Barrel Co.....	.....	.....	.....	Brass goods.....	38	4	See No. 1070.
1070	The Barnett Brass Co.....	.....	.....	.....	Engines, etc.....	300	30	" " 1071.
1071	The Aultman & Taylor Co.....	.....	.....	.....	Planing mill.....	25	.....	" " 1073.
1072	Nail & Ford.....	.....	.....	.....	Nickel-plating.....	8	3	.....
1073	Mansfield Plating Co.....	.....	.....	.....	Suspensers.....	3	1	.....
1074	The Buckey Suspender Co.....	.....	.....	.....	Steam boilers, etc.....	40	2	.....
1075	Mansfield Steam Boiler Works.....	.....	.....	.....	Carriage hardware.....	50	6	.....
1076	Mansfield Carriage Hardware Co.....	.....	.....	.....	Pumps, etc.....	1	1	.....
1077	The Humphrey Manufacturing Co.....	.....	.....	.....	General machinery.....	175	6	See No. 1077.
1078	Mansfield Machine Works.....	.....	.....	.....	Furniture.....	100	3	" " 1079.
1079	The Mansfield Buggy Co.....	.....	.....	.....	Carriages, etc.....	4	4	" " 1080.
1080	Faust & Wapner.....	.....	.....	.....	Sash, doors and blinds.....	70	.....	" " 1081.
1081	S. N. Ford & Co.....	.....	.....	.....	Stoves.....	90	6	.....
1082	The Baxter Stove Co.....	.....	.....	.....	Bending works.....	25	.....	.....
1083	Mills, Ellsworth & Co.....	.....	.....	.....	Soap.....	2	.....	.....
1084	Joseph Schbert.....	.....	.....	.....	Hairrows.....	12	.....	.....
1085	R. Lean & Son.....	.....	.....	.....	Tannery.....	4	.....	.....
1086	W. H. Carpenter.....	.....	.....	.....	Suspensers.....	50	15	.....
1087	Western Suspender Co.....	.....	.....	.....	Crackers, etc.....	20	20	See No. 1088.
1088	Crawford & Taylor.....	.....	.....	.....	Printing.....	40	20	" " 1089.
1089	The Herald Co.....	.....	.....	.....	Cigars.....	21	85	" " 1090.
1090	Hautzenroeder & Co.....	.....	.....	.....	Sash, doors and blinds.....	25	.....	" " 1091.
1091	Danforth & Proctor.....	.....	.....	.....	Suspensers.....	25	14	.....
1092	Ohio Suspender Co.....	.....	.....	.....	.....	9	.....	.....

MANSFIELD—Continued.

Number.	Name of firm.	Location	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
1093	Mansfield Box Manufacturing Co.	165 North Main street	Paper boxes	2	9	4	
1094	The Shield and Banner	5½ North Park street	Printing	19			
1095	Maxwell Brothers	North Main street	Dry goods store.	4	5		
1096	M. Black.	1 Main street	"	4	2		
1097	Scattergood & Co	8 North Main street	"	3	3	2	
1098	Reed & Ink	Main and Park streets.	"	5	4		
1099	J. H. Black.	"	"	3	2	1	
1100	McCracken & Co.	16 North Main street.	"	5	4	3	
1101	The News Printing Co.	Fourth and Walnut streets	Printing and binding	20	2		

SHELBY.

1102	F. Brucker.	Planing mill	6				See No. 1103.
1103	Shelby Carriage Works	Carriages	8				" 1104.
1104	Sutter, Barkdull & Co.	Furniture	23				" 1105.
1105	The Shelby Mill Co.	Flour, etc.	41				
1106	Heath Brothers.	"	4				

SANDUSKY COUNTY.

FREMONT.

1181	C. W. Tschumy	Bidwell avenue.	Furniture	7			See No. 1181.
1182	Blue & Halter.	Fulton street.	Sulky cultivators.	10		2	
1183	Lehr Brothers	North Center street	Agricultural implements	30			See No. 1183.
1184	Edgerton & Sheldon	Front street	Sash, doors and blinds.	18			" 1184.
1185	The Clous Shear Co.	Pine street.	Shears and scissors.	80	4	10	" 1185.
1186	The Herbrand Co.	East State street.	Gear irons	12			" 1186.
1187	D. June & Co.	Water street.	Engines, etc	56			" 1187.
1188	Koons Brothers	Bidwell avenue	Flour, etc.	4			" 1188.
1189	Van Epps & Cox.	Garrison and Water streets.	"	9			" 1189.
1190	McLean R. R. Spike Co.	West State street.	Railroad spikes.	65		10	
1191	Thomson-Houston Carbon Co.	"	Carbon	75		4	
1192	Fremont Drop Forge Co.	Hickory street.	Carriage hardware	20			
1193	Fremont Canning Co.	South street	Canned corn, etc.	25	60	10	See No. 1193.
1194	Fremont Electric Light and Power Co.	Wood street	Electric light.	4			" 1194.
1195	A. H. Jackson.	Front street.	Bustles and hose.	30	140	20	" 1195.

SENECA COUNTY.

FOSTORIA.

1149	Fostoria Slave and Barrel Co.	West Tiffin street	Barrels, staves, etc.	50	1	See No. 1150.
1150	The Isaac Harter Co.	Near L. E. & W. R. R. crossing	Flour, etc.	109	16	" 1151.
1151	Fostoria Glass Co.	Near Vine street	Table ware, etc.	109	25	" 1152.
1152	Koss, Mohler & Co.	North street	Planing mill	55		
1153	Walter S. Payne & Co.	Wood and Center streets	Brass and iron foundry, etc.	30	2	See No. 1154.
1154	Cunningham & Co.	Findlay street	Spokes and bent work	9		" 1155.
1155	Eureka Planing Mill and Lumber Co.	North and Cadwallader streets	Planing mill	25	40	" 1156.
1156	Nickel Plate Glass Co.	N. Y. C. & St. L. R. R.	Table ware, etc.	150	1	" 1157.
1157	J. P. Warner	Sandusky street	Flour and feed	17		" 1158.
1158	G. W. & J. H. Campbell	Wood and Center streets	Planing mill			
1159	American Food Evaporating and Preserving Co.	Tiffin street	Fruit evaporating	10	60	
1160	The Mamboury Glass Co.	C. & T. R. R.	Window glass	60		
1161	The Butler Art Glass Co.	Sandusky street	Cathedral glass, etc.	100	25	
1162	The Bevington Signal Co.	Near Tiffin street	Railroad signals	6	10	2

I. W. & F.

TIFFIN.

1163	N. Einsel & Co.	Washington and Hutton streets	Flour, etc.	6		See No. 1163.
1164	Tiffin Union Churn Co.	3 Washington street	Churns, washboards, etc.	45	13	" 1164.
1165	W. S. Bacon	Washington and Water streets	Flour, etc.	4		" 1165.
1166	Tiffin Agricultural Works	Harrison and Water streets	Agricultural implements	100	10	" 1166.
1167	E. S. Rockwell & Co.	18-20 Washington street	Woolen goods	40	30	
1168	Schuman & Co.	River street	Lager beer	11		
1169	Bickner & Ehrenfried	"	Rye whisky	2		
1170	G. W. Keller	"	Flour, etc.	2		
1171	Enterprise Manufacturing Co.	West Market street	Sash, doors, etc.	19		See No. 1171.
1172	Tiffin Manufacturing Co.	70 Melmore street	"	18	1	" 1172.
1173	Glick & McCormick	Adams street	Wagon supplies, etc.	24	1	" 1173.
1174	R. H. Whitlock	"	Boxes	30	8	" 1174.
1175	The Tiffin Glass Co.	"	Table ware	60	12	
1176	The National Machinery Co.	Greenfield street	Bolt and nut machinery	95	8	
1177	Loomis & Nyman	East Market street	General machine work	30		
1178	Lester Sutton (receiver)	Rear 14 East Market street	Feed mill	30		
1179	H. Hulbach	Foot of Madison street	Lager beer	2		
1180	The Ohio Stove Co.	"	Stoves	7		

STARK COUNTY.

CANTON.

741	Willis Lind & Co.	East Eighth street	Sash, doors, etc.	35	1	See No. 741.
742	Sun Vapor Street Light Co.	112-116 East Fifth street	Street lamps	25		
743	Fernando B. Smith	180-184 East Fourth street	Patent novelties	21	3	
744	Canton Iron Roofing Co.	233 East Tuscarawas street	Steel roofing, etc.	15		

CANTON—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
745	Excelsior Brass and Novelty Works.	114 East Eighth street.	Brass goods, etc.	8			
746	The Bucher and Gibbs Co.	126 East Seventh street.	Plows.	150		3	See No. 746.
747	Joseph Weaver and Son.	126 East Tuscarawas street.	Sash, doors, etc.	35		2	" 747.
748	James Campbell & Son.	208 " "	" "	24		4	" 748.
749	Berger Manufacturing Co.	East Ninth street.	" "	15		2	" 749.
750	The Universal Plow Co.	219 East Tuscarawas street.	Plows.	28			
751	Chieflain Hay Rake Co.	182-196 " "	Hay rakes, etc.	30			
752	Wrought Iron Bridge Co.	Saxton and Eighth streets.	Iron bridges, etc.	175		6	See No. 751.
753	Canton Steam Pump Co.	West Tuscarawas street.	Steam pumps.	13			
754	Dick's Agricultural Works.	Valley Railroad.	Agricultural implements.	25			
755	Canton Valley Cutlery Co.	Saxton and Ninth streets.	Pocket cutlery.	28		3	
756	J. Frick & Co.	Valley Railroad.	Flour and feed.	17			
757	McCurdy Store Works.	Valley Railroad.	Saves.	25			
758	Peerless Reaper Co.	Mulberry street.	Harvesting machinery.	125		2	See No. 757.
759	Ebel & Co.	117 South Cherry street.	Saddlery hardware.	148	1	47	" 758.
760	Canton Spring Co.	Liberty street.	Vehicle springs.	75		6	" 759.
761	Nobles & Sherlock.	16 Liberty and Liberty streets.	Foundry and machine work.	60			
762	Bolton Steel Co.	South Walnut street.	Steel.	125		4	
763	Canton Hoe and Tool Co.	South Walnut street.	Garden tools, etc.	12			
764	The Whitman and Barnes Mfg Co.	125 South Walnut street.	Drop forgings.	40		2	
765	Jos. Biechele Soap Co.	125 South Walnut street.	Soaps and flies.	12	4		
766	The Canton Saw Works.	Walnut and Ninth streets.	Flour and feed.	4		2	See No. 766.
767	George C. Harvey.	62 East Seventh street.	Surgical and dental chairs.	27			" 767.
768	Canton Surgical and Dental Chair Co.	90 South Rex street.	Revolving book-cases.	15		2	" 768.
769	Danner Manufacturing Co.	90 " "	Bee hives, boxes, etc.	23			" 769.
770	City Box Factory.	Navarre and Marion streets.	Feed cutters.	115	16	35	
771	W. E. Harris & Co.	Marion street.	Table ware.	20	1		
772	The Canton Glass Co.	South High street.	Hardware and specialties.	10		3	
773	The Ney Manufacturing Co.	Poplar and Cedar streets.	Lawn rakes.	60			
774	Canton Lawn Rake Co.	" "	Plows.	14			
775	The Gibbs and Ball Plow Co.	" "	Surgical chairs.	100			See No. 776.
776	The Harvard Co.	28 Jackson street.	Feed and windmills, etc.	100			" 777.
777	Wrigley Brothers.	Marion and Navarre streets.	Feed and windmills, etc.	10		3	" 778.
778	J. F. Blake.	South Market street.	Paper boxes.	10		8	" 779.
779	C. Aultman & Co.	Marion and Navarre streets.	Flour and feed.	575		10	" 780.
780	B. Danemiller & Sons.	North corner Public Square.	Agricultural machinery.	15		3	
781	The Gilliam Manufacturing Co.	Fourth and Court streets.	Coffee and spices.	21		7	
782	Diebold Safe and Lock Co.	Mulberry street.	Gig saddles, etc.	890		2	See No. 782.
783	M. H. Ashbaugh.	31 South Market street.	Safes and locks.	8		3	" 783.
784	F. Herbruck.	85 East Tuscarawas street.	Notions.	5		2	
785			Dry goods store.				

786	L. Abt	21 South Market street.....	2	8	1
787	Zollars & Co.....	9 Public Square	3	7	
788	P. Goudie	North Market	4	6	
789	Goldberg Brothers.....	50-54 South Market street.....	9	5	

ALLIANCE.

885	Elmer E. Cline.....	Ely street	6		
886	Millard & Co.....	Prospect street.....	7		
887	Stanley & Hawking	"	6		
888	Alliance Steam Boiler Works	Freedom and Patterson streets	4		
889	G. L. Chapman.....	Freedom street	3		
890	F. Bough	"	8		
891	Morgan Engineering Co.....	Broadway and C. & P. R. R.	400		
892	J. T. Weybrecht	Broadway	14		
893	The Solid Steel Co.....	C. & P. R. R.	200	15	See No. 902
894	The A. W. Coats Co.....	Prospect street.....	25	1	" 903
895	George N. Yant.....	Prospect and Mechanic streets.....	7		" 904

MINERVA.

906	Starkey & Vernie.....	Planing mill.....	5		See No. 906
907	Pennoek Brothers	Railroad cars	160	10	" 907
908	T. D. Yost	Furniture	12	1	" 908
909	Minerva Milling Co.....	Flour and feed.....	7		" 909

MASSILLON.

910	The Massillon Bridge Co.....	P. Ft. W. & C. R. R.	87		
911	Warrick & Justice	Massillon	16		
912	Massillon Glass Works	Canal street	155	46	
913	M. A. Brown & Son.....	113 South Erie street.....	13	2	
914	S. R. Wells.....	Canal street	66	3	
915	The Massillon Paper Co.....	South Erie street	40	10	
916	H. Snyder & Co.....	Canal street	63		See No. 916
917	A. F. Pocock	Erie street	13		" 917
918	C. J. Humberger & Son.....	15 East Main street.....	6	6	
919	C. Seibold	"	4	2	
920	Boke Brothers.....	"	2	4	
921	S. Oberlin & Sons	Main and Erie streets	2	2	
922	Altman & Putman	Main street	12	8	
923	Frank Cronc.....	P. Ft. W. & C. R. R.	3	2	
924	Joseph Cornis & Son	Main and Erie streets	104	10	
925	Peter Salter	Fremont and Erie streets	60	90	
926	Massillon Machine Co.....	Main and West streets	20	2	
927	Conrad, Dangier & Brown.....	Clay street	10	1	
928	Russell & Co.....	Erie street	650	15	See No. 928

SUMMIT COUNTY.

AKRON.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
22	Aultman, Miller & Co.	Center and Middlebury streets	Harvesting machinery	600	2	3	See No. 22.
23	J. F. Selberling & Co.	Near Union Depot.	Steam boilers, etc.	250	6	6	" 23.
24	The J. C. McNeil Co.	903 Broadway	Twine and cordage.	30	2	2	" 24.
25	Akron Twine & Cordage Co.	Hill street	Cooperage	35	24	1	
26	F. Schumacher Milling Co.	C. A. & C. R. R.	Oats dryer	47	1	5	
27	F. Schumacher Milling Co.	Broadway	Oats cleaning	18			See No. 27.
28	F. Schumacher Milling Co.	Summit street	Grain elevator	7			" 28.
29	F. Schumacher Milling Co.	"	Pearl barley	4			" 29.
30	F. Schumacher Milling Co.	"	Nickel-plating	25			" 30.
31	Akron Polishing & Plating Works.	Church street and Broadway	Stoves and general machine work.	6			" 31.
32	Taplin, Rice & Co.	"	Flour and feed.	15		1	
33	F. Schumacher Milling Co.	Mill and Howard streets.	Pearl and granulated hominy.	85	40	4	See No. 33.
34	F. Schumacher Milling Co.	Ash and Mill streets.	Flour and feed.	33			" 34.
35	F. Schumacher Milling Co.	North Howard street.	Flour and feed.	3			" 35.
36	F. Schumacher Milling Co.	"	Electric light.	30			" 36.
37	Citizens' Electric Light Co.	West Market street	Planting mill	6			" 37.
38	D. W. Thomas	"	Oat products.	21		3	" 38.
39	The Hower Co.	Canal and Cherry streets.	Flour and feed.	19	9		" 39.
40	Allen & Co.	Canal street	Fire-brick	17			" 40.
41	J. Park Alexander.	South Howard street.	Planing mill	20			
42	W. B. Doyle & Co.	Ash and Bowery streets.	Wood-turning, etc.	10			See No. 42.
43	Baker, McMullen & Co.	State street.	Planing mill	75	5	18	" 43.
44	A. A. Bartlett	"	General machine work.	13			" 44.
45	Dempsey Machine Co.	South Main street	Stoneware	11		1	" 45.
46	D. E. H. Merrill & Co.	210 State street	Varnish and japan.	47		2	" 46.
47	Kubler & Beck	Ash and Bowery streets.	General machinery.	3			
48	J. K. Williams	Ash street	Hardware specialties	3			
49	Enterprise Manufacturing Co.	Carroll and Exchange streets.	Flour sacks.	15	15	5	
50	The Hardware Manufacturing Co.	West Exchange street	Carriages and wagons	15	2		See No. 50.
51	The Thomas Phillips Co.	Middlebury and South Main streets	Mechanical and hard rubber.	30	14	6	" 51.
52	Christian Voght	Rubber street	Crackers and cakes.	10			
53	The B. F. Goodrich Co.	North Howard street	Electric light.	200	40	20	See No. 53.
54	The Akron Cracker Co.	North Main street.	Planing mill and box factory	8	4	2	
55	Akron Electric Light Co.	"	Holding machinery, etc.	3			See No. 55.
56	Wearry Snyder, Wilcox Manufacturing Co.	"	Leather belting	25			
57	Webster, Campbell & Lane Machinery Co.	"		133			
58	The Akron Belting Co.	"		2			See No. 58.

59	Werner Printing & Manufacturing Co.	South Howard street.	Lithographing, printing, etc.	70	60	10	10
60	The Beacon Publishing Co.	Mill and Main streets.	Printing and book-binding	63	15	8	8
61	Akron Contracting & Cabinet Co.	Cherry street.	Druggists' supplies, etc.	25	17		See No. 61.
62	Smith Brothers.	158 South Main street	Bar iron, etc.	400		12	See No. 63.
63	The Akron Iron Co.	South Broadway extension.	Planing mill	15			See No. 64.
64	C. W. Hankey	Pleasant street.	Matches	250	164		
65	The Diamond Match Co.	Taylor street.	Knives and sickles.	275	1		See No. 66.
66	Whitman & Barnes Manufacturing Co.	Middlebury and Carroll streets	Matches and chains	88	25		" 67.
67	Miller Match & Chain Co.	Rubber street	Roofing tile, etc.	65	5		" 68.
68	J. C. Ewart & Co.	110 Brook street	Spring wagons and truck gears	40	2		" 69.
69	The Selle Gear Co.	South Broadway extension	Sewer-pipe	30			
70	The Buckeye Sewer Pipe Co.	East Exchange street.	Stoneware	40			
71	The U. S. Stoneware Co.	Fountain belf Carroll and Exchange sta.	Sewer-pipe	90	10		See No. 71.
72	The Akron Sewer Pipe Co.	Case avenue.	Wood type, etc.	45			See No. 72.
73	The Hill Sewer Pipe Co.	East Market street	Flour and feed.	110	4	15	See No. 73.
74	Wood Type & Novelty Manufacturing Co.	River street	Flour and feed.	28			See No. 74.
75	Whitmore, Robinson & Co.	East Market street	Flour and feed.	28			See No. 75.
76	The Seiberling Milling Co.	Bank street	Flour and feed.	28			See No. 76.
77	The Akron Fire-brick Co.	Case avenue	Flour and feed.	28			See No. 77.
78	T. C. Budd.	Bank street	Flour and feed.	28			See No. 78.
79	Akron Steam Forge Co.	North Forge street.	Flour and feed.	28			See No. 79.
80	F. Horix.	Valley R. R.	Flour and feed.	28			See No. 80.
81	Robinson Brothers & Co.	South Arlington street.	Flour and feed.	28			See No. 81.
82	Weeks Brothers	Bank street	Flour and feed.	28			See No. 82.
83	Viall & Markell	Market and Arlington streets.	Flour and feed.	28			See No. 83.
84	Cook Fairbanks & Co.	Fountain street	Flour and feed.	28			See No. 84.
85	Akron Stoneware Co.	200 East Market street	Flour and feed.	28			See No. 85.
86	F. W. Rockwell & Co.	300-208	Flour and feed.	28			See No. 86.
87	The Ohio Stoneware Co.	114	Flour and feed.	28			See No. 87.
88	Kline & Johnston	116 South Howard street.	Flour and feed.	28			See No. 88.
89	John Wolf	132	Flour and feed.	28			See No. 89.
90	O'Neil & Dray	135-157	Flour and feed.	28			See No. 90.
91	Myers & Polak	151	Flour and feed.	28			See No. 91.
92	Margold & Holloway		Flour and feed.	28			See No. 92.
93	Murray Hardie & Watt.		Flour and feed.	28			See No. 93.
94	Brouse & Co.		Flour and feed.	28			See No. 94.

WAYNE COUNTY.

WOOSTER.

929	E. Thoman	North Buckeye street.	Tannery	6	6		
930	Wooster Co-operative Foundry Co.	East North street	Foundry and machine work	12			
931	D. C. Curry & Co.	122 East Liberty street	Sash, doors and blinds.	23			
932	Overholt & Co.	Cushman street	Flour and feed.	20			
933	W. Young	Larwell and Beaver streets	Bottling works.	8			
934	Alcock & Donald	112 East Liberty street	Granite works.	4			
935	E. Barrett's Sons.	East	General machinery	10			
936	W. H. Banker	South and Buckeye streets.	Carriages	6			
937	Underwood Whip Co.		Whips	45	15	4	

Wooster—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following First District.
				Males.	Females.	Minors.	
938	Plank Brothers.....	East Liberty and Beaver streets.....	Flour and feed.....	9			See No. 938.
939	Hartman & Dursline.....	Larwell and Beaver streets.....	Sash, doors and blinds.....	23		1	" 939.
940	Standard Coach Pad Co.....	Grant and Henry.....	Coach pads, etc.....	18	10	6	" 940.
941	Lands & George.....	48 West Liberty street.....	Furniture.....	5			" 941.
942	D. W. Immel.....	Liberty and Grant streets.....	Tannery.....	3			
943	Fred. Wells.....	Apple Creek road.....	Lager beer.....	6			
944	J. R. Nafziger.....	".....	Flour and feed.....	2			
945	Wooster Brush Works.....	35 South Market street.....	Brushes.....	17	10		
946	C. K. Bowman.....	Orrville road.....	Rye whiskey.....	4			
947	M. P. Huston.....	Beaver street.....	Laundrying.....	2	4		
948	H. J. Church & Co.....	5 East Liberty street.....	Dry goods store.....	7	5	2	
949	Quinby & Kline.....	East.....	".....	4	3	1	
950	Wm. Annat.....	3 East.....	".....	9	3		
ORRVILLE.							
951	Thomas Overton.....	P. Ft. W. & C. R. R.....	Tile.....	4			
952	F. Dyall & Brother.....	West Water street.....	Tannery.....	6			
953	Crystal Burial Case Co.....	Main street.....	Metallic burial cases.....	Idle			
954	The Orrville Milling Co.....	P. Ft. W. & C. R. R.....	Flour and feed.....	31			See No. 954.
955	Orrville Planing Mill Co.....	Chestnut street.....	Planing mill.....	7			" 955.
956	The Orrville Machine Co.....	West Water street.....	Thrashing machines.....	25			" 956.
STERLING.							
957	Amstutz & Co.....		Flour and feed.....	4			See No. 957.
958	The Sterling Wrench Co.....		Wrenches.....	35		4	" 958.
CRESTON.							
959	Russell Kerr.....		Cooperage.....	6			See No. 960.
960	The Creston Milling Co.....		Flour and feed.....	8			
FREDERICKSBURG.							
961	John C. Lytle.....		Woolen mill.....	3	2	1	See No. 962.
962	Imperial Flour Co.....		Flour and feed.....	5			

903 M. L. Stopphet..... See No. 903.
904 A. J. Peterman..... " " 904.

2
10

Brackets
Planing mill

WOOD COUNTY

PERRYSBURG.

1355	Perryburg Mill and Elevator	Flour, etc.....	3	.....	.....	.....
1356	S. P. Tolman	Baskets, etc.....	6	.....	.....	.....
1357	H. M. Hoover	Hoops	7	.....	.....	.....

BOWLING GREEN.

1358	Crystal City Glass Co	Bottles, etc.....	75	20	See No. 1358.
1359	Buckeye Novelty Glass Co.....	Flint glass goods	50	15	" " 1359.
1360	J. R. Hankey	Sash, doors, etc	20	.....	" " 1360.
1361	J. H. Bigelow	Planing mill	5	.....	" " 1361.
1362	The Lythgoe Glass Co	Glass hollow-ware	74	35	" " 1362.
1363	Bowling Green Window Glass Co	Window glass	100	4	" " 1363.
1364	Cramer & Reider	Flour, etc	4	.....	" " 1364.
1365	Bowling Green Machine Co	General machine work	3	.....	.....
1366	Royce & Coon.....	Grain elevator, etc	5	.....	.....
1367	Royce & Coon	Feed mill	3	.....	.....

NORTH BALTIMORE.

1368	The Dewey Slave Co.....	Slaves	25	2	See No. 1365.
1369	Enterprise Window Glass Co	Window glass	65	2	.....
1370	James Hardy & Co.....	General machine work	6	.....	.....
1371	Rockwell Brothers	Flour, etc	4	.....	.....
1372	North Baltimore Bottle Glass Co	Bottles	70	24	See No. 1372.
1373	A. Harnd	Sash, doors, etc	11	.....	" " 1373.

WYANDOT COUNTY.

UPPER SANDUSKY.

1142	Ingard & Smith	Planing mill	5	.....	See No. 1142.
1143	Kerr Brothers	Flour, etc	4	.....	" " 1143.
1144	John Shuey	Planing mill	13	.....	" " 1144.
1145	Agreter, Stevenson & Co.....	General machine work	Idle	.....	.....
1146	S. Beahler	Lager beer	3	.....	.....
1147	Jacob Gloesser	Tannery	3	.....	.....
1148	W. S. Streby	Flour, etc	1	.....	.....

Detailed Statement

OF CHANGES ORDERED IN FIRST DISTRICT.

- No. 4.—Ashtabula Tool Co. Cover top and front of swing-saws as far down as practicable.
- No. 5.—William Seymour & Son. Protect all exposed gearing on bolters and spur-wheels for driving middling mill in basement.
- No. 6.—Julius Williams. Provide rip-saws with guards.
- No. 7.—L. M. Crosby & Son. Provide protection for lower wheel of band-saw, to prevent accident in case saw should break.
- No. 8.—L. C. Newell. Provide belt on planer with shifter.
- No. 9.—American Nail Machine Co. Provide more substantial framework for water barrel over top of boilers.
- No. 10.—L. S. & M. S. R. R. Shops. Provide better ventilation in roundhouse, by placing four ventilators, at least fifteen feet long, in the roof, to take away steam and smoke.
- No. 16.—W. S. Burnham. Provide protection for exposed miter gearing on or about bolting chests, and inclose upright shaft at least four feet above the floor.
- No. 17.—Snyder Manufacturing Co. New cables for elevators, and gates for openings on each floor.
- No. 18.—Bradley Manufacturing Co. New cable for elevator.
- No. 21.—The London Rubber Co. Provide couplings on shaft under sewing-bench, and protection in front of shaft where operator sits.
- No. 22.—Aultman, Miller & Co. Provide a sheet-iron hood over space occupied by molds in brass foundry, hood to be connected with a large pipe leading to stack, in order to carry away fumes and gas; provide rip-saws with guards.
- No. 23.—J. F. Seiberling & Co. Provide new cables for elevator, and keep them well oiled to prevent rust; provide substantial protection under main belt over passage-way in reaper department, and guards for wood-shaper. Complied.
- No. 24.—The J. C. McNeil Co. Provide stairway on top floor with railing.
- No. 27.—The F. Schumacher Milling Co. (Dry house.) Provide casing in front of pulley on blower, second floor; cover miter gearing for driving conveyor, on top floor. Complied.
- No. 28.—The F. Schumacher Milling Co. (Cleaning house.) Cover miter gearing for running conveyor on fourth floor; keep cables on elevator well oiled. Complied.
- No. 29.—The F. Schumacher Milling Co. (Grain elevator.) Self-closing gates at top of elevator shaft. Complied.
- No. 30.—The F. Schumacher Milling Co. (Empire Mills.) Cut keys of pulleys off even with shaft to prevent clothing of persons being caught while passing; cover miter gearing on main upright shaft, third floor, spur gearing wheels for driving separators in attic, and heavy miter gearing in basement for driving main upright shaft. Complied.
- No. 31.—Akron Polishing and Plating Works. Provide all emery and polishing-wheels with an exhaust to carry away dust.

- No. 33.—The F. Schumacher Milling Co. (Cereal Mills.) Cover all exposed gearing on line shafts, miter gearing for driving conveyor in basement, miter gearing for driving conveyor in attic, miter and spur gearing for driving bolters, scalpors, etc.; provide protection before all miters or bolters in any way exposed. Complied.
- No. 34.—The F. Schumacher Milling Co. (Stone Mills.) Provide substantial protection under main belt over head in passage-way; casing in front of large pulley at east door entering husk; a railing on south side of passage-way between plank and top of large miter gearing; cover heavy miters on line shaft for driving bolts on third floor, heavy miters on line shaft for driving elevators on fourth floor, heavy gearing for driving scalpors on fourth floor; case in belt for driving purifiers in attic; provide protection in front of all miter gearing of bolters. Complied.
- No. 35.—The F. Schumacher Milling Co. (Hominy Mills.) Cover miters on line shafting for driving elevators on top floor; provide protection in front of miters or bolters. Complied.
- No. 36.—The F. Schumacher Milling Co. (Cascade Mills.) Provide casing between all large pulleys and gearing on line shafting, in basement; cover exposed miters for driving coolers, third floor, miters on fourth floor for driving conveyors, spur-wheels on bolters at stairway to attic, and all exposed gearing in attic; provide protection in front of all exposed miter and spur gearing on or about bolters. Complied.
- No. 37.—Citizens' Electric Light Co. Provide fly-wheel and belt on side of engine with railing.
- No. 38.—D. W. Thomas. Provide rip-saws with guards; protection for band-saw in case saw should break. Complied.
- No. 39.—The Hower Co. Cover miter gearing on main upright, fourth floor, and miter gearing for driving sweeps on dry-kilns; provide fly-wheel of stationary engine with a casing or railing. Complied.
- No. 40.—Allen & Co. Box heavy gearing on main shafting at foot of stairway in basement; cover exposed gearing on main shaft, second floor, miter gearing on second floor for driving elevators, and all exposed miter and spur gearing in attic; provide protection in front of all exposed miter gearing on or about bolters. Complied.
- No. 42.—W. B. Doyle & Co. Provide wood-shaper and rip-saws with guards.
- No. 43.—Baker, McMillen & Co. Provide rip-saw with guard. Complied.
- No. 44.—A. A. Bartlett. Provide guards for wood-shaper and rip-saws.
- No. 45.—Dempsey Machine Co. Provide opening at top of elevator shaft with gate; repair boxing of emery-wheel spindle, and keep emery-wheels in a more true condition.
- No. 46.—D. E. H. Merrill & Co. Cover miter gearing on shafting for driving clay mills.
- No. 50.—The Hardware Manufacturing Co. Provide a sheet-iron hood over top of japanning oven doors—hood to be at least four feet long and three feet wide—the same to be connected, by means of an eight or ten-inch pipe, to chimney, to allow the offensive fumes and smoke to escape. Complied.
- No. 51.—The Thomas Phillips Co. Post minors' notice; in the future, under no circumstances, allow minors under the age of eighteen years to work more than ten hours in any one day; provide new cable for elevator, and allow no person to ride on same until some safety device has been attached, such as double cables, etc.; provide collars on spindle for rolling paper, when finished, as it comes from the rolls, with counter-sunk set-screws; protection in front of speed gearing and miters for driving presses.

- No. 53.—The B. F. Goodrich Co. Cover all exposed gearing on grinding, mixing, washing, drying and calender rolls; provide sufficient ventilation in bicycle vulcanizing room to allow steam to quickly escape; provide new cable for elevator, and keep cables on elevators well oiled to prevent them from rusting; railing or casing for fly-wheel of engine in machine shop; additional means for escape from new building by erecting three balcony incline-ladder fire-escapes, one on front, on Rubber street, one on south end of each wing facing Falor street. Complied.
- No. 56.—Weary, Snyder, Wilcox Manufacturing Co. Provide new cable for elevator; provide, for rip-saws, those that have not already been protected, saw-guards; stationary guard over saw or dado head, when saw or head is at back end of table on cut-off or dado machine.
- No. 58.—The Akron Belting Co. Case in fly-wheel of stationary engine; provide railing at elevator opening in front of cables, second floor; fasten chain to top of upright arm of jack, and then to floor above, to prevent arm from falling in case bolt should break; guard over starting gearing where the mash in belt winder; move bars of elevator at least three inches away from platform; mark, in conspicuous letters, on elevator doors, "Elevator—Dangerous." Complied.
- No. 61.—Akron Contracting and Cabinet Co. Provide guards for rip-saws and shaper.
- No. 63.—The Akron Iron Co. Cover shafting between engine and ore mill.
- No. 64.—C. A. Hankey. Provide guards for rip-saw and wood-shaper; shifters for belts on planers; hood over knives on pannel raiser.
- No. 66.—The Whitman & Barns Manufacturing Co. Prevent emery-wheels from being run at a higher rate of speed than that given by manufacturer of said wheel; provide new cable on elevator, and keep well oiled to prevent rust; shifters on belts for driving grindstones; cover shafting for driving two stones next to south entrance, also tumbling mills. Complied.
- No. 67.—The Miller Match and Chain Co. Provide self-closing gate at top of elevator shaft.
- No. 68.—J. C. Ewart & Co. Cover gearing on packers' miter, No. 4 mill; provide railing between fly-wheel and main bearing of Corlies engine; casing between No. 3 mill and boy working at tile press, and No. 2 mill and boy operating clay elevator.
- No. 69.—The Selle Gear Co. Provide rip-saws with guards; cover gearing for driving valve.
- No. 71.—The U. S. Stoneware Co. Post minors' notice—complied with; provide new post for fastening starting lever for clay mill next to engine, hooks for holding lever, substantially fastened, instead of bolts; railing at least three feet high in front of line shaft, near floor, in what is known as store house, and box over all couplings, with projecting set-screws, on same shaft. Complied.
- No. 73.—The Hill Sewer Pipe Co. Provide railing between fly-wheel pit and main bearing of engine.
- No. 76.—The Seiberling Milling Co. Provide new cable for elevator; place guard in front of miters on bolters and scalpels, on fifth and sixth floors; ladder from floor to bearing on line shaft next to pulley for driving dust collector, and casing between ladder and pulley; ladder from floor to bearing on line shaft, behind heavy miter gearing, fifth floor, and casing between miters, also collar with projecting set-screws, and position for man while oiling.
- No. 77.—The Akron Fire Brick Co. Case in main belt next to floor; provide casing in front of spur gearing on line shaft to engine, and cover two holes in cover over shaft gearing, etc., for driving dry pan. Complied.

- No. 81.—Robinson Brothers & Co. Provide new cable for elevator and keep well oiled.
- No. 82.—Weeks Brothers. Provide casing or railing for fly-wheel of engine.
- No. 83.—Viall & Markell. Provide railing between fly-wheel and main bearing and fly-wheel and tail bearing, from side where engineer enters to oil engine; a run-way over clay mills for convenience of oiler; cover miter gearing on shaft overhead for driving clay mills, and give friction pully one-half inch more lift.
- No. 85.—The Akron Stoneware Co. Provide belt on pug mill with shifter; casing in front of spur-wheel next to pulleys, same mill; casing or railing on each side of line shaft, second floor; covering over belt from same shaft through floor near clay elevator; a new wood cone for friction clutch for new clay mill.
- No. 91.—Hatch Printing Co. Post minors' notice. Complied.
- No. 93.—F. Pollard. Provide stop at end of draw bench to prevent grip-block from leaving bench when grip slips.
- No. 103.—Cleveland Barbed Fence Co. Provide casing between operators and pointing machines.
- No. 105.—D. A. Shepard. Provide guards for rip-saws and wood-shapers.
- No. 107.—Bohm & Stuhr. Provide guards for rip-saws; casing in front of bottom wheel of band-saw; protection to prevent saw from striking sawyer in case saw should break.
- No. 113.—O'Donnell & Barrett Machine Co. Provide suitable water-closets for use of employes.
- No. 114.—H. M. Hempy & Son. Provide self-closing gates for elevator opening; rip-saws with guards; belts on planers with shifters.
- No. 115.—Brooks Contracting and Building Co. New cable on elevator.
- No. 116.—Lord, Bowler & Co. Provide fly-wheel of engine with railing or casing. Complied.
- No. 117.—C. S. Ransom. Provide guards for rip-saws; cover or guard over top of swing-saw, cover to extend down as far as practicable; new cable for elevator.
- No. 124.—Viaduct Foundry Co. Repair cover for tumbling mills.
- No. 126.—Carrick & Cochrane. Provide an exhaust for grinding and polishing-wheels, to carry away dust.
- No. 129.—Viaduct Boiler Works. Cover gearing overhead for driving heavy punch.
- No. 131.—Lamp and Brass Works of W. J. Gordon. Enlarge ventilating stack from pickling room.
- No. 132.—The Lapham Dodge Co. Provide shifter for belt on large planer; casing for line shaft, also for stairway from first floor.
- No. 133.—Forest City Spring Works. Provide for the better ventilation of the forging room—either exhaust or wall fan.
- No. 136.—Cleveland Burial Case Co. Provide new cables for elevators, and keep same well oiled to prevent rust.
- No. 141.—Hughes Steam Pump Works. Provide railing between fly-wheel pit and main bearing of engine; exhaust pipe through roof to carry away steam while testing pumps; grating of hard wood for a floor that water will run back into cistern; change all drip connections that they will not drip in cistern.
- No. 143.—Powell Tool Co. Provide new cable for elevator; cover gearing on heavy shears in west end of forging shop.
- No. 144.—Cleveland Stove Co. Erect balcony incline-ladder fire-escape on the outside of building facing Main street; provide new cable for elevator.

- No. 146.—Myers, Osborn & Co. Cover all tumbling mills; provide an exhaust system to carry away dust from emery-wheels; new cable for elevator.
- No. 150.—D. L. Scheier & Co. Provide additional water-closet for use of females; provide means for employes to gain roof in case of fire.
- No. 153.—Excelsior Water Proof Co. Provide gates for elevator openings.
- No. 157.—Thomas Manning, Jr., & Co. Provide casing or railing for fly-wheel of engine.
- No. 159.—Garry Iron Roofing Co. Cover exposed gearing on corrugating rolls; replace and keep in repair gates at elevator openings.
- No. 164.—Fulton Foundry. Provide large sky-light in roof of foundry where car wheels are made, next to C., C., C. & I. shop.
- No. 165.—C., C., C. & I. R. R. Shops. Provide additional means for ventilation in roundhouse; rip-saws with guards.
- No. 166.—National Flour Mills. Provide casing or railing before all gearing on bolters, scalpers, etc.; cover coupling on shaft from Smith flour dressing machines; couplings with projecting set-screws; box all upright shafts at least four feet above the floor; case in all heavy miter and spur gears, shafting and belting in basement near passage-way for oiler; reduce number of hours labor per day for minors; keep record of minors, according to statutes.
- No. 169.—The T. H. Bullock Bellows and Forge Co. Provide rip-saws with guards; casing or railing for fly-wheel of engine.
- No. 175.—F. Zimmerman. Provide guards for rip-saws.
- No. 177.—Forest City Machine Works. Provide new cable for elevator, and gates for opening at top floor.
- No. 178.—Excelsior Iron Works Co. Provide more suitable place for water-closet, in order to connect with sewer on premises.
- No. 181.—Palmer & DeMooy. Provide new cable for elevator.
- No. 184.—J. H. Kippenberg. Case in exposed belting, line shafting and coupling over stairway; also casing before bottom wheel of band-saw.
- No. 186.—Cleveland Twist Drill Co. Reduce speed of emery-wheels to that designated by manufacturers' catalogue. Complied.
- No. 188.—Bowler & Co. Repair boxing of emery-wheel spindles, and reduce speed of wheels to that designated by manufacturers' catalogue.
- No. 193.—F. Smead & Co. Provide guards for rip-saws, and compel workmen to use them.
- No. 194.—Bell, Cartright & Co. Provide guards for wood-shaper and rip-saws, and protect band-saw; new cable for elevator.
- No. 195.—Forest City Box Factory. Provide guards for rip-saws. Present guards not safe.
- No. 196.—F. Hendrickson. Provide railing for fly-wheel of engine.
- No. 200.—Rogers & Son. Provide new cables for elevators; guards for rip-saws.
- No. 202.—River Blast Furnace. Straighten and make more substantial columns and foundation for air-tank.
- No. 203.—Potter, Birdsall & Co. Provide guard for rip-saw on second floor.
- No. 204.—Woods, Jenks & Co. Provide casing in front of bottom wheel of band-saws, and protection to catch saw in case it should break; guards for rip-saws on second floor A and B mills.
- No. 208.—The Colwell & Collins Norway Bolt Co. Provide belts with shifters.
- No. 210.—The Hotchkiss & Upson Co. Cut connection of exhaust and hot drips from sewer.

- No. 213.—Davidson & House. Provide safety device for elevator, to prevent cage from falling in case cable should break; case in bottom wheel of band-saw; provide saw guards.
- No. 217.—Standard Target Co. Post child-labor notices. Complied.
- No. 221.—James Davis. Provide new cable for elevator.
- No. 227.—Walworth Run Foundry Co. Provide pulley and fly-wheel of engine with casing or railing.
- No. 236.—West Side Furniture Co. Provide guard for rip-saw; case in main belt, shafting and pulleys for driving wood-working machinery on first floor; provide suitable water-colset, with proper sewers and water connections.
- No. 243.—J. & F. A. Wagner. Post child-labor notices. Complied.
- No. 246.—M. M. Glekler. Post child-labor notices. Complied.
- No. 251.—J. B. Smith. Provide casing or railing for fly-wheel of engine.
- No. 253.—Schaber, Reinthal & Co. Post child-labor notices. Complied. Keep record of minors; provide rip-saws with guards.
- No. 260.—Columbia Injector Co. Post minors' notices; keep record of minors employed under eighteen years of age. Complied.
- No. 262.—Pearl Steam Laundry. Post child-labor notices. Complied.
- No. 264.—Cleveland Wheelbarrow Co. Provide guard for wood-shaper.
- No. 265.—Forest City Cracker Co. Provide protection for operator of dough-break, to prevent getting hands caught in rolls; cover exposed gearing on same machine.
- No. 268.—Collister & Foster. Provide guard for rip-saws.
- No. 269.—The Taylor & Boggis Foundry Co. Provide water pans for emery-wheels in basement; repair exhaust for polishing wheels, in order to carry away dust.
- No. 270.—Meriam & Morgan Paraffine Co. Keep record of minors; provide railing at elevator opening, second floor, barrel house; elevators with safety device, double cables or side catches; lay plank across elevator opening, with platform above plank, while loading and unloading.
- No. 272.—M. J. Keller. Provide casing or railing for fly-wheel of engine; casing in front of bottom wheel of band-saw.
- No. 274.—H. B. Hunt. Provide new cable for elevator in old building; water-closets with proper water connections, and keep closets in better sanitary condition; keep old pipes from sinks closed to prevent escape of gas from same.
- No. 275.—F. B. Newton. Provide casing or railing for fly-wheel of engine; guard for rip-saw.
- No. 276.—Johnston & Austin. Cover over tumbling mill to prevent operator from inhaling dust arising from same; safety-catches for elevator.
- No. 278.—N. Y., L. E. & W. R. R. Shops. Post child-labor notice. Complied. Provide casing or railing between fly-wheel pit and main bearing of engine in machine shop; rip-saws with guards.
- No. 279.—Peck, Stow & Wilcox. Provide new cable for elevator in main shop; large wall fan in tumbling mill room, to relieve room of dust.
- No. 280.—John Nahuis. Provide rip-saws with guards—present spreaders now in use are not sufficient.
- No. 281.—Saunders & Son. Provide casing in front of bottom wheel of band-saws; rip-saws with guards.
- No. 282.—M. G. Brown & Co. Post child-labor notices. Complied. Provide shifter for belt on planer.
- No. 283.—Fred. Hempy & Co. Provide casing in front of bottom wheel of band-saw; guards for rip-saws.

- No. 284.—Cleveland Paper Co.—(Forest Street Mills.) Reduce the number hours labor per day of minors under eighteen years of age—in no case allow them to work more than ten hours in any one day; case in gearing driving rag-bleach.
- No. 286.—Joseph Mares. Provide casing in front of bottom wheel of band-saw; rip-saw with guard.
- No. 289.—Monroe Brothers. Provide safety-catches for elevator, and allow no person to ride on same until complied with.
- No. 296.—W. H. Gabriel. Provide guard for rip-saw.
- No. 308.—The White Sewing Machine Co. Keep record of minors under eighteen years of age; new cables for elevators in face room, packing room and casting room.
- No. 314.—The Lithograph Tinware Co. Keep record of minors; provide casing in front of pulley or fly-wheel of engine.
- No. 316.—L. Richardson. Provide safety strips in front of top front feed-roll on sandpaper machine, strips to be of wood or iron, the full length of roll, two inches wide and thick enough to stand considerable pressure, the bottom of strip to be but a trifle above bottom of top roll that boards will feed under strip without obstruction or interference with strip; strips must be so fastened that it will raise or lower with top roll; also guards for rip-saws.
- No. 319.—A. Bichlmyer. Provide gate at elevator opening, top floor.
- No. 325.—Wm. Weber. Keep record of minors; provide water-closet for exclusive use of females.
- No. 326.—George MacElwee. Case in counter-shaft for running circular saw.
- No. 327.—F. & H. Born. Keep record of minors; provide exhaust system to carry away dust from grinding wheels.
- No. 328.—Mount & Co. Provide water-closet on third floor for exclusive use of female employes.
- No. 336.—Cleveland Nitrous Oxide Works. Provide shifter for belt driving hydraulic pump, and casing in front of pulley.
- No. 337.—L. C. Abraham Bros. & Co. Keep record of minors; provide casing in front of bottom wheel of band-saws.
- No. 348.—C. Pheiff. Provide safety strip on sandpaper machine, strip to be the length of top of front of feed-roll, two inches wide and thick enough to bear considerable pressure; strip to be placed in front of top of feed-roll and so fastened that bottom of strip will be higher than bottom of top roll, and raise and lower with same; cover gearing on sandpaper machine; provide guard for rip-saw; casing in front of bottom wheel of band-saw.
- No. 349.—Morely Lead Co. Provide new cable for elevator. Complied.
- No. 358.—Valley R. R. Repair Shops. Provide casing in front of bottom wheel of band-saw; guard for rip-saw.
- No. 359.—The Cleveland Axle Manufacturing Co. Case in exposed gearing on shears in forging room; provide counter-sunk set-screws for holding reamers in drill press spindles; keep record of minors.
- No. 360.—Cleveland Paper Co. Case in band-wheels of engine driving calender rolls, large cone in machine room, and belt for driving fan pump, and provide new cable for elevator in rag room.
- No. 368.—Excelsior Steam Laundry. Provide safety strip in front of hot roll on collar and cuff machine to prevent hand of operator being caught under roll; strip should be just above bottom of roll that work will feed without interfering with strip.
- No. 369.—Sigler Brothers. Cover miter gearing on wire-drawing machine.

- No. 380.—The Van Wie Stove Co. Discharge minor under twelve years of age. Complied.
- No. 382.—Montgomery & Co. Provide an exhaust for carrying away dust from grinding and polishing-wheels; cut off all hot drips from sewers to prevent the communication of gas to building.
- No. 388.—Mayer & Co. Provide guard for rip-saw; case in bottom wheel of band-saw, and protection to catch band-saw in case it should break.
- No. 389.—Mercantile Manufacturing Co. Provide casing in front of bottom wheel of band-saw, and protection to catch saw should it break; casing around belt running through floor.
- No. 390.—Pierce & Chamberlain. Keep minors' record; provide protection in front of shaft under sewing-machine bench to prevent clothes of operators from wrapping around shaft; new cable for elevator.
- No. 391.—The Press. Cut off all hot drips from sewers to prevent the communication of gas to building.
- No. 398.—Forest City Paper Co. Provide gates for elevator openings on each floor.
- No. 399.—Vowie Brothers. Reserve one water-closet for the exclusive use of females employed.
- No. 400.—Spero & Wittman. Provide separate water-closet for female employees, and see that they are kept in proper condition.
- No. 408.—J. M. Weitz & Co. Provide protection in front of shaft under sewing-machine bench, to prevent clothing of operatives being caught.
- No. 412.—Worswick Manufacturing Co. Covering for all exposed gearing on threading lathes.
- No. 413.—Cleveland Steam Laundry. Provide new cable for elevator; elevator openings on each floor with gates; safety strip in front of ironing rolls; strip should be full length of rolls and at least two inches higher, and thick enough to stand considerable pressure.
- No. 414.—Lloyd & Keys. Elevator having no safety device, instructions should be given to employees before stepping on to load or unload, to place plank under platform across opening, and in no case allow employees to ride on elevator until some safety device has been provided. I would recommend double cables.
- No. 415.—The Miller Brothers Paint and Varnish Co. Instruct employees to use plank under platform of elevator, across opening, while loading and unloading, elevator having no safety device, and allow no one to ride on same until some protection has been provided. Would suggest new elevator entire.
- No. 419.—Cleveland Paper Co. Keep gates of elevator openings on each floor closed; watch cable on elevator attached to steam hoisting engine, strans are broken and can not be relied on—are unsafe.
- No. 420.—Koch, Goldschmith & Co. Provide new cable for elevator in two-story building, and keep cable well oiled to prevent rust; place casing between fly-wheel of stationary engine and main bearing.
- No. 421.—Weil, Joseph & Co. Provide protection under sewing-machine benches to prevent clothes of operatives from wrapping around shafting; additional railing at elevator openings on each floor.
- No. 422.—Klein, Goodhart & Koch. Provide additional means of escape in case of fire by erecting balcony intline-ladder fire-escape on the north side of building, facing St. Clair street, balconies to take in two windows with hand-railings on outside of ladders.
- No. 423.—A. W. Sampliner. Provide protection in front of shafting under sewing-machine bench to prevent clothing of operator from being caught.

- No. 424.—M. T. Silver & Co. Provide new cable for elevator.
- No. 425.—H. Freedman. Provide protection in front of shafting under bench for driving knitting-machines; additional means of escape from building in case of fire by erecting balcony incline-ladder fire-escape on outside of north side of building on St. Clair street, balcony to extend across two windows and ladders to incline between same with hand-railing. Complied.
- No. 433.—A. Jacobs. Keep record of minors in accordance with statutes; case in belt running through floor; provide protection in front of shafting under sewing-machine bench.
- No. 434.—The Standard Tobacco and Cigar Co. Provide fly-wheel of stationary engine with casing or railing; attach hinges to windows of sky-light in two-story building that they may be easily opened, in order to secure better ventilation; keep record of minors as provided by statutes of Ohio.
- No. 435.—The Cleveland Electric Light Co. Place casings or railings in front of all fly-wheels of engines and belts where they run under band-wheels from dynamos to engines.
- No. 450.—Kuhlmann Bros. Place casing in front of bottom wheel of band-saw, and protection to catch saw in case it should break; compel employes to use saw-guards.
- No. 451.—H. Beckenbach & Sons. Place safety strip in front of top feed-roll of sand-paper machine; strip should be full length of roll, two inches wide and heavy enough for considerable pressure, and should be so fastened that bottom of strip will be above bottom of top roll and raise and lower with same.
- No. 452.—Lake Erie Mills. Cover miter gearing for driving drying-reel at top of stairway leading to basement; provide light casing between stairway leading from second to third floor and miter gearing on line shaft.
- No. 453.—Cleveland Gas Fixture Manufacturing Co. Provide an exhaust fan for drawing dust from grinding and buffing-wheels; secure better ventilation in brass foundry by providing wall ventilating fan or exhaust fan for buffing-wheels, and connect pipe with brass foundry—ventilating wall fan for foundry is suggested.
- No. 455.—C. & P. R. R. Repair Shop. Provide guards for rip-saws and compel employes to use them.
- No. 456.—L. S. & M. S. R. R. Car Shops. Provide guards for rip-saws.
- No. 457.—L. S. & M. S. R. R. Repair Shops. Cover exposed gearing on bolt machine in blacksmith shop; provide better ventilation in roundhouse by raising center of roof five or six feet, making a dome ventilator of it, to keep building clear of smoke and steam.
- No. 458.—T. H. Brooks & Co. Provide safety device for elevator to prevent platform from falling, should cable break, and allow no person to ride on same until this order is complied with. Would suggest double cables.
- No. 463.—The Avery Elevator Bucket Co. Provide an exhaust to draw away dust from large emery-wheels.
- No. 464.—The Standard Carbon Co. Keep record of minors as provided by statutes; provide dust collector to gather dust from crushing and grinding machinery.
- No. 466.—T. S. Balkwell. Provide guard for rip-saw.
- No. 467.—The Cleveland City Forge and Iron Co. Reduce speed of emery-wheels to 1,080 revolutions per minute, and keep same in more true condition; provide exhaust fan to draw dust from emery-wheels in buckle department; keep record of minors as provide by section 6986, statutes of Ohio.

- No. 468.—The Jonathan Mill Manufacturing Co. Place safety strip in front of top front feed-roll of sandpaper machine, strip to be the full length of the roll and so fastened that bottom of strip will be slightly above lower part of top feed-roll and will raise and lower with same; case in bottom wheel of band-saw, and provide protection to catch saw should it break; provide guard for rip-saw.
- No. 473.—The H. P. Nail Co. Provide condensing barrel for hot drips to prevent same from escaping in sewer.
- No. 474.—Ohio Steel Barb Fence Co. Keep record of minors as provided by statutes.
- No. 475.—The Acme Machinery Co. Provide casing or railing for fly-wheel of stationary engine.
- No. 480.—The Silver Metal Manufacturing Co. Provide casing for fly-wheels and pulleys, same to extend beyond where main belt runs under pulley; exhaust fan to draw away dust from polishing and buffing-wheels.
- No. 485.—The National Carbon Co. Provide dust collector to gather dust from crushing and pulverizing department.
- No. 486.—Lake Erie Iron Co. Place railing around fly-wheel of large nut machine in forging shop; new cable for elevator.
- No. 487.—C. A. Krauss & Sons. Provide guards for rip-saws and compel employes to use them.
- No. 489.—P. Huberty. Provide guard for rip-saw; casing in front of bottom wheel of band-saw.
- No. 493.—The Chisholm Steel Shovel Works. Keep exhaust fans for drawing away dust from grinding wheels and belts running; would suggest that a change be made in piping—that round galvanized iron pipe with hose-piping from wheels to enter suction pipe on an angle with draft.
- No. 495.—The Excelsior Bread, Cake and Cracker Works. Provide protection to prevent operatives from getting hand caught between rolls on dough-break. Would suggest that a board, wide as can be conveniently used, be fastened in front of feed-rolls, and feed dough under board; the board should be at least six inches wide; also provide same arrangement for cracker machine, and place casing in front of fly-wheels of dough-breaks.
- No. 496.—Herig & Deericks. Provide guard for rip-saw; casing in front of bottom wheel of band-saw.
- No. 497.—Whitney, Raymond & Co. Provide safety strip in front of top feed-roll of sandpaper machine; strip must be full length of roll, two inches high and thick enough to bear considerable pressure, and so fastened that bottom of strip will be a very little higher than bottom of top feed-roll—strip can be made of wood or iron—would suggest iron; new cable for elevator, and additional railing at elevator opening on third floor.
- No. 502.—Standard Ladder Works. Case in counter-shafting on floor for driving rip-saw and wood-shaper, and provide guards for saw and wood-shaper.
- No. 504.—The Taylor & Boggis Foundry Co. Provide an exhaust fan to carry away dust from emery-wheels.
- No. 510.—Cleveland Co-operative Stove Co. Provide all tumbling barrels with covers so as to hold dust; also exhaust to draw dust from emery-wheels.
- No. 511.—The Standard Sewing Machine Co. Provide protection in front of shafting under sewing-machine table used by female employes, on top floor, to prevent their clothing from wrapping around shafting or catching on projecting set-screws; an exhaust fan to draw dust from polishing and buffing-wheels—would suggest two separate exhausts, one for the two rooms on top floor and one for room below.

- No. 514.—G. M. Heard & Co. Provide exhaust fan to carry dust from polishing and buffing-wheels and belts.
- No. 515.—The National Safe & Lock Co. Provide exhaust fan to carry dust from emery, polishing and buffing-wheels.
- No. 516.—Cleveland Woolen Mills. Provide casing or railing for fly-wheel; case in main belt from engine to line shaft.
- No. 517.—The I. N. Topliff Manufacturing Co. Keep emery-wheels in a more true condition; see that ventilating fan in grinding department is kept in motion in order to draw away dust.
- No. 519.—The Standard Foundry & Manufacturing Co. Cover all tumbling mills to hold dust; provide exhaust fan to draw dust from emery-wheels; guard for rip-saw.
- No. 525.—Gorham & Sargent. Case in all counter-shafting on floor for driving wood-working machinery; place casing in front of bottom wheel of band-saw.
- No. 526.—Cleveland Malleable Iron Works. Provide guard for rip-saw; make frequent examinations of ladle shanks, and prevent their use when in a dangerous condition. Complied.
- No. 532.—The Cleveland Rubber Co. Cover exposed gearing on calender rolls and gearing for driving grinding mills; provide guard for rip-saw.
- No. 533.—The Eberhard Manufacturing Co. Exhaust fan for drawing dust from emery-wheel in room 24 is not in good working order—change pipes that connect from wheel to suction so that they will enter suction on an angle with draught, and extend hood around under bottom of wheel and connect pipes to hood under same, in order that dust may be thrown directly in the piping; provide exhaust fan for drawing dust from polishing-wheels in room 28; also exhaust fan for same purpose in gating room in charge of W. F. Jones.
- No. 539.—A. M. Welti. Place railing around fly-wheel of stationary engine; provide cut-off saws with covers or guards, the guards to be extended down in front as far as convenient, and over top and down back of saw.
- No. 552.—Bowler & Co. Place railing around fly-wheel of stationary engine.
- No. 553.—Killian Egert. Provide covers for equalizing saws over top and back of same.
- No. 554.—Excelsior Quilting Co. Provide additional means of escape from building in case of fire, by erecting balcony incline-ladder or stairway on outside of building fronting on Sheriff street; balconies to take in two windows, and ladders or stairway run between windows on an incline; ladders or stairway must have flat treads and be guarded with railing.
- No. 555.—J. H. Allen. Erect balcony incline-ladder or stairway fire-escape on outside of building fronting on Sheriff street; balconies to take in two windows, and ladders or stairway on an incline between the windows and provided with flat treads and guarded with hand-railing; provide protection in front of shafting under sewing-machine table to prevent clothing of operatives from being caught on same.
- No. 556.—C. Barker. Place casing around belt running through floor; box in weight on coil wire spring machine.
- No. 557.—The Gabel & Frisby Co. Water connections to closets are in bad condition—repair the same so that it will properly flush bowls, etc., and that closets can be kept clean.
- No. 558.—The Bell Steam Laundry. Provide separate water-closets for use of female employees
- No. 563.—Rosenheim & Manche. Place protection in front of shafting under sewing-machine tables, to prevent operatives' clothing being caught.

- No. 572.—Adams, Jewett & Co. Keep record of minors; provide protection in front of shafting under sewing-machine table, to prevent operatives' clothing being caught on same; new cable for elevator—one in use unsafe. Complied.
- No. 573.—Corney & Johnson. Provide additional means of escape in case of fire, by placing a balcony incline-ladder or stairway on the outside of building fronting on Academy street; balcony must extend across and take in two windows, and the ladders or stairway pass down between same, and provided with hand-railing; keep record of minors, as provided by statutes.
- No. 574.—Adams & Ford. Place protection in front of shafting under sewing-machine tables to prevent operatives' clothing being caught; oil cables on elevators to prevent rust.
- No. 575.—Felsenheld Brothers & Co. Provide protection in front of shafting under sewing-machine tables, to prevent operatives' clothing being caught on same.
- No. 576.—The D. Black Cloak Co. Provide additional means of escape by placing balcony incline-ladder or stairway on the southwest corner of building at alley or driveway; balcony must take in two windows, and ladder or stairway pass down on an incline between same, and provided with hand-railing.
- No. 581.—Thompson Manufacturing Co. Cover all exposed gearing.
- No. 587.—The Chapin Bolt and Nut Co. Place covers over cutting heads on threading lathes operated by female employes, to prevent their clothing being caught by projecting set-screws.
- No. 588.—W. H. Garlock. Cover exposed gearing on cuff machine.
- No. 593.—A. Williamson & Co. Place protection in front of shafting under sewing-machine tables, to prevent clothing of operatives being caught on same.
- No. 602.—L. Rickenberg. Case in pulley on line shaft at top of stairway; and also casing in front of main belt at bottom of stairway.
- No. 603.—George Counter. Provide rip-saws with saw-guards; place casing in front of bottom wheel of band-saw.
- No. 604.—C. J. Herig. Provide sandpaper machine with safety strip, to prevent operatives from getting hands between feed-rolls—strip to be full length of rolls, two inches high, and thick enough to bear considerable pressure, and so fastened that bottom of strip will be little above bottom of top feed-roll and raise and lower with same; provide saw-guards for rip-saws; case in bottom wheel of band-saw.
- No. 605.—The Cleveland Rolling Mill Co. Provide new cable for elevator, and gates for openings of same on first floor, three-story building, wire mills; cover exposed gearing on roll lathes in plate mills; all exposed gearing on roll lathes in lathe room, and gearing on straightening press; cover spindle of new rod mill, where it couples to No. 1 engine; provide railings for fly-wheels of Nos. 1 and 2 engines; casing under main belt from No. 3 engine, new rod mill.
- No. 610.—Enterprise Egg Case Co. Place casing in front of bottom wheel of band-saw.
- No. 616.—W. Sayle & Co. Provide rip-saw with saw-guard.
- No. 617.—A. McAllister. Provide elevator opening at stairway with wire netting, to prevent persons from being caught by elevator platform; netting must be at least two feet high from balustrade, to prevent persons from looking over.
- No. 618.—Lake Erie Iron Co. Place casings in front of couplings on all mills; cover exposed gearing on all lathes; provide fly-wheels of stationary engines, one driving roll lathes, etc., and the other for driving blowers, with casing or railings.
- No. 621.—Alex. J. McCrea. Provide gates for elevator openings on each floor.

- No. 622.—Beckman, Senior & Co. Cover exposed gearing on fulling machines; keep record of all persons employed under the age of eighteen years.
- No. 623.—The Standard Oil Co. Place casing in front of bottom wheel of band-saw; provide all rip-saws with guards; guard fly-wheels of buffing engine and engine for driving wax cutters, also hoisting machinery.
- No. 627.—Diebolt & Wehlein. Provide elevator opening on top floor with gates.
- No. 628.—Latimer & Moore. Provide belts on planers with shifters; all rip-saws with saw-guards.
- No. 629.—Troy Steam Laundry. Place safety strip in front of feed and ironing rolls of mangle on first floor; strip must be full length of rolls, and so fastened that bottom strip is slightly higher than bottom of top roll; case in exposed gearing on ironing mangle and collar and cuff-machine.
- No. 637.—Likly, McDonald & Rockett. Provide elevator openings on each floor with gates; placing casing in front of bottom wheel of band-saw; also some device on top pulley to catch saw in case it should break; guards for all rip-saws.
- No. 638.—Short & Foreman. Provide railing for fly-wheel of stationary engine; casing around all belts running through floors.
- No. 639.—The Cleveland Clothing Factory. Place protection in front of shafting under sewing-machine tables, to prevent operatives' clothes from being caught.
- No. 640.—Ohio Baking Co. Provide dough-break with some protection to prevent operatives from getting hands between rolls; place casing in front of fly-wheel of the same machine.
- No. 646.—G. W. Lewis & Co. Cover exposed gearing on rolls next to stairway and smooth roll on second floor; repair protection in front of gearing on bolters.
- No. 647.—W. Medlin. Place railing around fly-wheel of ice machine.
- No. 657.—The Cleveland Baking Co. Place casing in front of fly-wheels of all dough-breaks; provide some protection to prevent operatives from getting their hands between rolls of breaks.
- No. 658.—Eagle Steam Laundry. Provide safety strip on ironing mangle to prevent operative from getting hand between rolls; cover exposed gearing; provide belt-shifter on collar and cuff machine.
- No. 678.—J. Sykes. Provide suitable seats for female employees.
- No. 686.—Schedler & McWatters. Provide suitable seats for female employees.
- No. 687.—H. Grombacher. Provide suitable seats for female employees.
- No. 727.—Barnesville Woolen Mills. Former changes ordered, in reference to machinery, have been complied with.
- No. 730.—T. & A. Rodgers. Former changes ordered, in reference to machinery, have been complied with.
- No. 733.—City Mills.—Former changes ordered, in reference to machinery, have been complied with.
- No. 741.—Willis, Lind & Co. Provide guards for rip-saws.
- No. 746.—The Bucher & Gibbs Co. Place railing around fly-wheel of stationary engine.
- No. 747.—Joseph Weaver & Son. Provide saw-guards for rip-saws on first floor; all shift-belts with shifters; casing in front of bottom wheel of band-saw.
- No. 748.—James Campbell & Son. Provide guards for rip-saws; cover over top and front of swing-saw; a cap or cover over top of knives on pannel raiser.
- No. 749.—Berger Manufacturing Co. Provide elevator openings on each floor with gates.
- No. 751.—The Chieftain Hay Rake Co. Provide guards for shaper and rip-saws.

- No. 757.—McCurdy Stove Works. Cover all tumbling mills; provide iron pans, to be hung under emery-wheels, and keep same full of water to catch dust.
- No. 758.—Peerless Reaper Co. Provide guards for rip-saws; new cable for elevator in main building; also one for elevator outside of main building.
- No. 759.—Ebel & Co. Provide exhaust system for emery and grinding-wheels, to carry away dust.
- No. 766.—The Canton Saw Works. Provide shaper and rip-saw with guards; place railing around fly-wheel of stationary engine.
- No. 767.—George C. Harvey. Place protection in front of all exposed miter gearing on bolters; also cover all exposed gearing in attic.
- No. 768.—Canton Surgical and Dental Chair Co. Provide exhaust fan for the purpose of carrying away dust from polishing and grinding-wheels.
- No. 769.—Danner Manufacturing Co. Guards on buzz and swing-saws must be kept in use; place casing around counter-shafting on floor for driving Universal wood-worker; provide all shift-belts with shifters.
- No. 770.—City Box Factory. Provide guards for rip-saws; also guard or cover over top and front of swing-saw, cover to extend over front of saw as far as practicable.
- No. 776.—The Canton Car Co. Provide exhaust fan to carry away dust from emery and polishing-wheels.
- No. 777.—The Canton Car Co. All rip-saws must be provided with guards, and the same kept in use at all times when practicable.
- No. 778.—Wrigley Brothers. Place casing around shafting with projecting set-screws on strawboard press; shifter for belt on same machine; board or casing under belt for driving scorer.
- No. 779.—J. F. Blake. Provide protection in front of miter gearing on bolting chests; case in pulley for driving bran dusters and scour machines; cover large miter gearing on line shaft in basement.
- No. 780.—C. Aultman & Co. Provide guards for wood-shapers; elevator openings on each floor with gates; cover eccentric gearing on table punch; place casing around pulley and gearing pit on bending rolls in boiler shop.
- No. 782.—The Gilliam Manufacturing Co. Place protection in front of shafting under sewing-machine tables to prevent clothing of operatives being caught.
- No. 783.—Diebold Safe & Lock Co. Provide exhaust fan for purpose of carrying away dust from emery, grinding and polishing-wheels; new cable for elevator from door room.
- No. 790.—T. Ault & Son. Place protection around main driving pulley.
- No. 802.—Belmont Glass Works. Former changes, in reference to machinery and elevator, complied with.
- No. 823.—Buckeye Glass Works. Changes ordered, in reference to machinery and elevator, complied with.
- No. 826.—L. Spence. Former changes ordered, in reference to machinery, have been complied with.
- No. 832.—Pearl Mills. Former changes ordered, relative to machinery, have been complied with.
- No. 839.—Electric Light & Power Co. Former changes ordered, relative to machinery have been complied with.
- No. 846.—Robert Hyde. Former changes ordered, relative to machinery, have been complied with.
- No. 849.—John Franey's Sons & Co. Former changes ordered, relative to machinery have been complied with.

- No. 850.—Great Western Fire-Clay Co. Former changes ordered, relative to machinery, complied with.
- No. 852.—Bowers & Custer. Former changes ordered, relative to machinery, have been complied with.
- No. 860.—Wellsville Terra Cotta Co. Former changes ordered, relative to machinery, have been complied with.
- No. 865.—C. & P. R. R. Repair Shop. Former changes ordered, relative to machinery, have been complied with.
- No. 867.—Specialty Glass Co. Post minors' notices. Complied.
- No. 868.—The Golding & Sons Co. Former changes ordered, relative to machinery, have been complied with.
- No. 870.—S. & W. Baggott. Former changes ordered, relative to machinery, have been complied with.
- No. 876.—C. Metsch. Former changes ordered, relative to machinery, have been complied with.
- No. 877.—McNicol, Burton & Co. Changes ordered in relation to elevator, have been complied with.
- No. 878.—Burford Brothers. Former changes ordered, relative to machinery, have been complied with.
- No. 883.—Knowles, Taylor & Knowles. Former changes ordered, relative to ventilation, have been complied with.
- No. 889.—William Brunt, Son & Co. Former changes ordered, relative to ventilation, have been complied with.
- No. 902.—J. T. Weybrecht. Provide guards for rip-saws and wood-shapers.
- No. 903.—The Solid Steel Co. Place casing around pits containing pulleys and belts for driving mixing mills.
- No. 904.—The A. W. Coats Co. Place railing along fly-wheel of Buckeye engine; provide guards for rip-saws; a cover or guard over top and front of swing-saw.
- No. 905.—George N. Yant. Provide all shift-belts with shifters; all rip-saws with saw-guards.
- No. 906.—Starkey & Vernie. Provide fly-wheel of engine with casing; rip-saw with saw-guard; shift-belts with shifters.
- No. 907.—Pennock Brothers. Provide fly-wheel of stationary engine for driving machine shop with casing or railing; rip-saws with saw-guards; wood-shaper with guard; guard or cover over top and front of swing-saw; cover over top and front of gainer; casing in front of bottom wheel of band-saw.
- No. 908.—T. D. Yost. Provide guards for rip-saws and wood-shaper.
- No. 909.—Minerva Milling Co. Place casing or railing around fly-wheel of stationary engine; place protection in front of exposed miter gearing on bolters, scalpers and seales; cover all exposed miter and spur gearing in attic, and miter gearing for driving flour dressers in basement.
- No. 916.—Hess, Snyder & Co. Provide guard for rip-saw.
- No. 917.—J. F. Pocock. Extend railing in front of fly-wheel of stationary engine within a few inches of shaft; place protection in front of all exposed gearing on bolters, scalpers and purifiers; cover all exposed gearing in attic, and miter gearing for driving conveyor on second floor; case in pulley for driving scourer and brush machine; box all upright shafting at least four feet above the floor; erect fire-escape.
- No. 928.—Russell & Co. Provide gates for all elevator openings, and all rip-saws with saw-guards. Complied.

- No. 938.—Plank Brothers. Place protection in front of all exposed gearing on bolting chests.
- No. 939.—Hartman & Durstine. Provide all shift-belts with shifters; all rip-saws with saw-guards; wood-shapers with guards; covering in front of bottom wheel of band-saw, and protection in front of saw to catch same in case it should break.
- No. 940.—Standard Coach Pad Co. Provide additional means of escape from building in case of fire by erecting a balcony incline-ladder fire-escape on the outside of building, or by providing another separate and distinct stairway in the southeast corner of building.
- No. 941.—Landis & George. Provide guard for wood-shaper.
- No. 954.—The Orrville Milling Co. Cover spur gearing on roll on second floor; spur gearing for driving conveyors; protection in front of all exposed gearing on bolters, scalpers, etc.
- No. 955.—Orrville Planing Mill Co. Railing for fly-wheel of stationary engine; guards for rip-saws and wood-shapers; casing in front of bottom wheel of band-saw, and protection to catch same in case it should break.
- No. 956.—The Orrville Machine Co. Provide guard for rip-saw.
- No. 957.—Amstutz & Co. Place protection in front of all exposed gearing on bolters and scalpers; provide fly-wheel of stationary engine with railing.
- No. 958.—The Sterling Wrench Co. Provide exhaust fan to carry away dust from emery and polishing-wheels.
- No. 960.—The Creston Milling Co. Place protection in front of all exposed gearing on bolters.
- No. 962.—Imperial Flour Co. Provide railing for fly-wheel of stationary engine; protection in front of all exposed gearing on bolters and scalpers; cover all spur gearing on rolls and miter gearing in basement on upright for driving purifiers, etc., and all exposed gearing in attic.
- No. 963.—M. L. Stophlet. Provide guard for rip-saw.
- No. 964.—A. J. Peterman. Provide all shift-belts with shifters; rip-saws with saw-guards and wood-shaper with guard.
- No. 965.—Lorain Wrench Co. Place casing in front of band-wheel and belt on stationary engine; provide an exhaust fan to carry away dust from emery and polishing-wheels.
- No. 966.—Lorain Novelty Co. Provide an exhaust fan to carry away dust from emery and polishing-wheels.
- No. 967.—Lorain Lumber & Manufacturing Co. Provide all shift-belts with shifters; casing in front of bottom wheel of band-saw, and protection to prevent accident in case saw should break or slip off.
- No. 968.—C. L. & W. R. R. Car Shops. Provide guards for all rip-saws.
- No. 969.—The United Brass Co. Provide an exhaust fan to carry away dust from buffing-wheels; rip-saws with guards; casing in front of bottom wheel of band-saw, and protection to catch saw should it break; cover all exposed gearing on tumbling mills, and provide same with covers to hold the dust.
- No. 975.—A. I. Root. Provide guards for rip-saws; extend casing on V groover as far down in front of knives as practicable.
- No. 983.—The Topliff & Ely Co. Cover gearing on large press; provide guards for rip-saws; elevator openings on each floor with gates; casing in front of bottom wheel of band-saw, and protection to prevent accident in case the saw should slip off or break.
- No. 984.—C. Parsch. Provide guards for rip-saws; shifters for all shift-belts; cover line shafting in passage-way in basement.

- No. 985.—J. W. Hart. Provide guards for rip-saws.
- No. 986.—Elyria Canning Co. Discharge the following-named minors employed, who are under the age of twelve years: John Fattersall, Sarah Rogers, Anna Creager, Tena Barbknecht, and in the future allow no minor under the age of twelve years to be employed, nor minors under the age of eighteen years to be employed a longer period in one day than ten hours; post notice of hours of labor, and keep minors' record. Complied.
- No. 987.—The Western Automatic Machine Screw Co. Provide an exhaust fan to carry away dust from polishing and emery-wheels.
- No. 991.—D. J. Brown & Co. Provide guards for rip-saws.
- No. 992.—G. W. Icsman. Provide cover over top and front of swing-saw, cover to extend down over front of saw as far as practicable.
- No. 993.—Sandusky Tool Co. Provide guards for rip-saws.
- No. 1004.—Sandusky Machine and Agricultural Works. Provide guards for rip-saws.
- No. 1005.—Schoeffle & Sloane. Provide guards for rip-saws.
- No. 1006.—Jay C. Butler & Co. Provide guards for rip-saws; additional means of escape in case of fire by erecting balcony incline-ladder fire-escape.
- No. 1007.—B. & O. R. R. Co. (Repair Shops.) Provide fly-wheels of stationary engine with railings; guards for rip-saws. Complied.
- No. 1016.—C., S. & C. R. R. Shops. Provide guards for rip-saws and wood-shapers.
- No. 1017.—The Sandusky Wheel Co. Place cover over top and front of swing-saw, cover to extend down over front of saw as far as practicable; provide guard for rip-saw; new cable for elevator.
- No. 1018.—B. B. Hubbard & Son. Provide guards for all rip-saws; fly-wheel of stationary engine with railing.
- No. 1019.—Mackey & Merrick. Provide guards for all rip-saws.
- No. 1020.—Lea & Herbert. Provide guards for rip-saws.
- No. 1023.—J. S. Cowdery. Provide guard for rip-saw.
- No. 1025.—Fremont Cultivator Co. Provide an exhaust fan to carry away dust from emery and polishing-wheels.
- No. 1026.—McLaughlin & Co. Cover all exposed gearing on rolls; protect all exposed miter gearing on bolters.
- No. 1027.—Gross & Weber. Provide guards for rip-saws.
- No. 1028.—Boehm & Yanquell. Provide protection in front of exposed gearing on bolters and scalpors; provide new fly-wheel for engine. The one now in use is cracked at spokes and rim, and is very dangerous. Complied.
- No. 1029.—Heymon & Co. Provide protection in front of gearing on bolters and scalpors, and cover all exposed gearing in attic.
- No. 1030.—S. E. Smith. Provide guard for rip-saw.
- No. 1038.—The A. B. Chase Co. Cover exposed gearing on sandpaper machine, and use safety strip to prevent operator from getting hand between feed-rolls. The strip must be the full length of the rolls, two inches high, heavy enough to stand considerable pressure, and so fastened that the bottom of strip is slightly above bottom of top front feed-roll, and so arranged that the strip will raise and lower with roll; provide guards for rip-saws and wood-shapers.
- No. 1039.—L. S. & M. S. R. R. Shops. Provide guards for rip-saws.
- No. 1040.—W. & L. E. R. R. Shops. Provide better ventilation in blacksmith shop by placing a ventilator, at least fifteen feet long, in roof; also guard for rip-saw.
- No. 1046.—S. E. Crawford. Provide guards for rip-saws.

- No. 1047.—Theodore Williams & Son. Cover heavy miter gearing on line shafting on second floor, exposed spur gearing on rolls, same floor, and protection in front of all exposed gearing on bolters and scalpers; exhaust pipes or hot drips must not be allowed to enter sewer, as it will destroy same, and is liable to create sickness.
- No. 1048.—D. E. Morehouse. Provide guards for rip-saws.
- No. 1049.—C. W. Smith. Place casing in front of bottom wheel of band-saw, and protection to catch same, in case it should break or slip off; provide guards for rip-saws and wood-shapers.
- No. 1050.—Smith & Himberger. Provide fly-wheel of stationary engine with a railing; rip-saws and wood-shapers with guards.
- No. 1058.—The Hexagon Postal Box Manufacturing Co. Provide guards for rip-saws.
- No. 1059.—Wm. Schubert. Provide guards for rip-saws.
- No. 1060.—The Bostwick & Burgess Manufacturing Co. Provide rip-saw with guard; additional means of escape from building, by placing a balcony incline-ladder fire-escape on the outside of southeast corner of building, or by providing such run-way from top floor to ground as suggested. Complied.
- No. 1070.—The Barnett Brass Co. Provide exhaust fan to carry away dust from polishing and emery-wheels.
- No. 1071.—The Aultman & Taylor Co. Place railing between fly-wheel of stationary engine and main bearing, railing to extend from wall past bearing; provide guards for all rip-saws; additional gate or bar at elevator openings.
- No. 1072.—Nail & Ford. Provide guards for rip-saws and wood-shapers.
- No. 1073.—Mansfield Plating Co. Provide exhaust fan to carry away dust from polishing and buffing-wheels.
- No. 1077.—The Humphrey Manufacturing Co. Provide fly-wheel of stationary engine with casing or railings; tight covers for all tumbling mills, to hold dust.
- No. 1078.—Mansfield Machine Works. Provide fly-wheel of stationary engine with railing; also rip-saws with saw-guards. Complied.
- No. 1079.—The Mansfield Buggy Co. Provide guard for rip-saw; casing in front of bottom wheel of band-saw, and protection of some character to catch saw should it slip off of top wheel or break.
- No. 1080.—Faust & Wappner. Provide guards for rip-saws and wood-shapers.
- No. 1081.—S. N. Ford & Co. Provide guards for rip-saws and wood-shapers.
- No. 1088.—Crawford & Taylor. Place casing in front of all exposed fly-wheels of dough-breaks, and protection to prevent employes from getting hands caught between rolls of same while feeding machine. Complied.
- No. 1089.—The Herald Co. Provide better trough in which to wash forms, so that water will run away, and prevent dirty water from standing around the floor. Would suggest brick and cement basin under floor, with proper sewer connections, and an iron grating over top of basin.
- No. 1090.—Hautzenroeder & Co. Keep record of minors employed under the age of eighteen years.
- No. 1091.—Danforth & Proctor. Provide guards for rip-saw and wood-shaper; cover top and front of swing-saw, cover to extend as far down over front of saw as practicable.
- No. 1103.—Shelby Carriage Works. Provide guards for rip-saw and wood-shaper; casing in front of bottom wheel of band-saw, and protection in front of top wheel to catch saw should it slip off or break.
- No. 1104.—Sutter, Barkdull & Co. Provide guard for rip-saw.
- No. 1105.—The Shelby Mill Co. Place protection in front of all exposed gearing on bolters and scalpers.

- No. 1107.—Shearer, Kagey & Co. Provide all shift-belts with shifters; rip-saws with saw-guards.
- No. 1108.—John Damp. Cover exposed gearing on rolls; box all upright shafts at least four feet above the floor; provide fly-wheel of stationary engine with casing or railing.
- No. 1113.—Gray & Adams. Provide guards for all rip-saws.
- No. 1114.—Henry Snyder. Place railing in front of fly-wheel of engine and main belt.
- No. 1115.—Maxwell, Hecker & Pomerene. Provide protection in front of all exposed gearing on bolting chests and dressing machines.
- No. 1116.—Plank, Gray & Co. Provide fly-wheel and crank of stationary engine with railing, and also protection in front of all exposed gearing on bolters.
- No. 1117.—Central Ohio Wheel Co. Provide guards for all rip-saws; casing in front of fly-wheel and main belt of engine; a guard or cap over knives of wood-shapers used for retinating; cap or guard over knife-heads on rim planes.
- No. 1118.—Armstrong, Daily & Co. Provide guard for wood-shaper; protection to catch band-saw in case it should break or slip off of top wheel.
- No. 1119.—Central Lounge Manufacturing Co. Provide guards for rip-saw and wood-shaper.
- No. 1123.—Eckstein & Roff. Provide guard for rip-saw.
- No. 1124.—The Burch Plow Co. Provide guard for wood-shaper.
- No. 1125.—P., F. W. & C. R. R. Shops. Provide guard for rip-saw.
- No. 1128.—Vallrath Brothers. Provide guards for rip-saws and wood-shaper.
- No. 1129.—C. Roehr. Provide guards for rip-saws and wood-shapers; place casing in front of pulley on engine shaft in mill; place railing around fly-wheel in engine-room.
- No. 1130.—C. Roehr. Provide guards for all rip-saws and wood-shapers; place casing or railing around fly-wheel of stationary engine; provide an exhaust fan to carry away dust from sandpaper wheels.
- No. 1131.—T. & O. C. R. R. Shops. Provide guard for rip-saw; casing in front of bottom wheel of band-saw, and protection to catch same should it break or slip off of top wheel; cover small exposed miter gearing on radial drill; keep vault cleaned properly and use disinfectant for same. Complied.
- No. 1132.—Bucyrus Foundry & Manufacturing Co. Provide new cable for elevator; elevator openings on each floor with gates; guards for rip-saws; railing for fly-wheel of engine. Complied.
- No. 1133.—Eagle Machine Works. Provide guard for rip-saw.
- No. 1134.—G. R. Zeigler. Provide fly-wheel of engine with casing or railing; case in line shaft and pulleys in basement, at all passage-ways for oiling and at each bearing; cover heavy miter gearing on line and upright shaft in basement; protection in front of all exposed gearing on bolters; cover miter gearing on line shaft for driving bolters; place casing between pulleys and belting on rolls.
- No. 1135.—Bucyrus Electric Light Co. Provide fly-wheel of engine with railing; belts with casings on bottom side next to floor.
- No. 1142.—Ingard & Smith. Provide guards for rip-saws and wood-shaper.
- No. 1143.—Kerr Brothers. Provide railing for fly-wheel of engine; protection in front of all exposed miter gearing on bolters and scalpers; cover miter gearing on line shaft, on top floor, for driving scalpers.
- No. 1144.—John Shealy. Provide all rip-saws and wood-shapers with guards; casing in front of bottom wheel of band-saw, and protection to catch saw should it break or slip off of top wheel. I find one 13-inch rip-saw that is cracked—in no case must you allow a cracked saw to be used.

- No. 1150.—The Isaac Harter Co. Provide protection in front of all exposed miter gearing on bolters and scalpors; cover miter gearing on line shaft for driving bolters; also miter gearing on line shaft on west side of deck between first and second floors, used for driving conveyors. Complied.
- No. 1151.—Fostoria Glass Co. Discharge Joseph Lee and Harry Brookman, and all other minors in your employ under twelve years of age; keep record of all minors in your employ under the age of eighteen years. Complied. Provide casing in front of bottom wheel of band-saw.
- No. 1152.—Koss, Mohler & Co. Provide casing in front of bottom wheel of band-saw; guards for rip-saws and wood-shapers.
- No. 1154.—Cunningham & Co. Provide guards for rip-saws; cover top of equalizing saws; provide railing for fly-wheel of engine.
- No. 1155.—The Eureka Planing Mill & Lumber Co. Provide guards for rip-saws.
- No. 1156.—The Nickel Plate Glass Co. Discharge Chas. Schuman and Albert Davis, and all other minors in your employ under twelve years of age; keep record of all minors in your employ under the age of eighteen years.
- No. 1157.—J. P. Warner. Reduce the hours of labor per day required of minors under eighteen years of age, so as not to exceed ten hours in any one day, or sixty hours per week; provide substantial protection in front of all exposed miter gearing on bolters and scalpors; provide banister or railing on the side of each flight of stairs.
- No. 1158.—G. W. & J. H. Campbell. Provide guards for rip-saws and wood-shaper; casing in front of bottom wheel of band-saw.
- No. 1163.—N. Einsel & Co. Provide additional means of escape by erecting a balcony incline-ladder or stairway fire-escape on the south side of building, balcon to take in two windows, the ladders passing down on an incline between same; protection in front of all exposed miter gearing on bolters and scalpors.
- No. 1164.—The Union Churn Co. Provide guards for rip-saws and wood-shapers; casing or safety strip in front of feed-rolls of short planer on second floor, strip to be made of iron, and so fastened that the bottom of strip or casing is a little above the bottom of top front feed-roll, in order that it will raise and lower with rolls; extend cover over top of knives on small planer on first floor, as far down as practicable. Complied.
- No. 1165.—W. S. Bacon. Provide protection in front of all exposed gearing on bolters and scalpors.
- No. 1166.—Tiffin Agricultural Works. Provide guards for rip-saws and wood-shapers; casing in front of bottom wheel of band-saw, and protection to catch saw in case it should break or slip off of top wheel.
- No. 1171.—Enterprise Manufacturing Co. Provide guards for all rip-saws; casing in front of bottom wheel of band-saw, and protection to catch saw in case it should break or slip off of top wheel.
- No. 1172.—Tiffin Manufacturing Co. Provide guards for all rip-saws and wood-shapers; casing in front of top front feed-roll of short planer; strip to be of iron and so fastened that bottom of strip or casing is a little above bottom of top front feed-roll, strip to raise and lower with same.
- No. 1173.—Glick & McCormick. Provide guards for rip-saws and wood-shapers.
- No. 1174.—R. H. Whitlock. Provide guards for all rip-saws; casing or railing for fly-wheel of engine; self-closing gate for elevator opening.
- No. 1181.—C. W. Tschumy. Provide saw-guards for rip-saw, also for wood-shaper; cover top and front of swing-saw, cover or guard extending down over front of saw as far as practicable.

- No. 1183.—Lehr Brothers. Provide guard for rip-saw; also exhaust pan for emery-wheels to carry away dust.
- No. 1184.—Edgerton & Sheldon. Provide guards for rip-saws and wood-shapers; cover exposed gearing on sandpaper machine, and place casing or safety strip on same in front of top front feed-roll, casing or strip to be made of iron and fastened so that the same will be a little above bottom of top front roll and raise and lower with the roll; place casing in front of bottom wheel of band-saw, and provide protection to catch saw in case it should break or slip off of top wheel.
- No. 1185.—The Clous Shear Co. Provide casing or railing for fly-wheel of stationary engine.
- No. 1186.—The Herbrand Co. Provide railing for fly-wheel of stationary engine; change pipes of exhaust on emery-wheels so that two currents will not come in contact—would suggest that you speed up fan and provide pipes with a cut-off in order that draught can be thrown entirely on wheel or wheels; abandon urinals inside of shop, unless sewer and proper water connections are provided, and use outside water-closet and provide same with water connections in order that it may be flushed when necessary; also would suggest that disinfectants be freely used.
- No. 1187.—D. June & Co. Provide guard for rip-saw.
- No. 1188.—Koons Brothers. Place protection in front of all exposed gearing on bolters and scalpers.
- No. 1189.—Van Epps & Cox. Place protection in front of all exposed miter gearing on bolters and scalpers; casing in front of fly-wheel of stationary engine case in belt for driving cleaning machines in attic, and heavy miter gearing in basement.
- No. 1193.—Fremont Canning Co. Discharge minor under twelve years of age, and in no case allow minors under the age of eighteen years to work more hours than ten in any day of the week.
- No. 1194.—Fremont Electric Light and Power Co. Provide fly-wheel of engine with railing; casing over belts where they run next to floor, from engine to shafting and shafting to machines.
- No. 1195.—A. H. Jackson. Cover shafting and pulleys under sewing-machine tables.
- No. 1204.—The Conant Brothers. Provide self-closing gate for elevator opening on top floor; guards for all rip-saws and wood-shapers; sandpaper machine and short planer with casing or safety strip in front of top feed-rolls, casing or strip full length of roll, and so fastened that bottom of strip will be a little above bottom of top roll and raise and lower with same.
- No. 1205.—Witker Manufacturing Co. Provide railing for fly-wheel of stationary engine and main belt where it runs under band-wheel; wood-shapers with guards cover gearing on sandpaper machines, also casing or safety strip in front of top front feed-roll, strip to be made of iron and so fastened that bottom of strip will be a little above bottom of top roll and raise and lower with same.
- No. 1213.—Western Manufacturing Co. Provide guards for wood-shapers and rip-saws cover gearing on sandpaper machine, and provide casing or safety strip in front of top feed-roll, same to be made of iron and fastened so that bottom of strip will be a little above bottom of top roll and raise and lower with roll.
- No. 1214.—The Schauss Manufacturing Co. Place casing in front of bottom wheel of band-saw; provide guards for wood-shapers; casing or safety strip in front of top feed-roll of sandpaper machine and short planer, casing or strip to be made of iron and so fastened that bottom of strip will be a little above bottom of top roll and adjust with same.
- No. 1215.—J. V. Sanfleet. Provide guards for all rip-saws.

- No. 1221.—T. J. Collins & Co. Provide guard for wood-shaper and casing in front of bottom wheel of band-saw.
- No. 1222.—Toledo Carriage Wood-work Co. Provide guards for all rip-saws.
- No. 1223.—Roth & Freedman. Provide casing in front of main belt where it runs under pulley of engine; box shafting under knitting-machine tables.
- No. 1224.—Ohio Moulding & Picture Frame Co. Provide guards for all rip-saws; casing in front of bottom wheel of band-saw; casing or safety strip in front of feed-roll on short planer, strip to be so fastened that bottom of same will be a little above bottom of top roll.
- No. 1225.—W. O. Brown & Son. Provide gates for elevator openings on each floor.
- No. 1230.—The Toledo Electric Co. Provide fly-wheels of all stationary engines with railings or casings. Complied.
- No. 1231.—Variety Spring & Machine Works. Provide fly-wheel of stationary engine with railing; belts running through floors with casings.
- No. 1232.—E. C. Shaw & Co. Cover or box shafting under sewing-machine tables.
- No. 1233.—Worts, Kirk & Bigelow. Place protection in front of exposed fly-wheel of dough-break, also protection to prevent operatives getting their hands between rolls of same.
- No. 1234.—The Blade Printing & Paper Co. Provide additional means of escape from building by erecting two balcony incline-ladder fire-escapes on outside of building, one at southwest corner of building in alley, the other on north-west corner; balconies to take in two windows and ladders passing down on an incline between the same with hand-railings thereon.
- No. 1237.—The Goulet Manufacturing Co. Provide railing for fly-wheel of engine; rip-saws and wood-shapers with guards; sandpaper machine with covering or safety strip in front of top feed-roll, strip to be so fastened that it will be a little above bottom of top roll.
- No. 1238.—A. Mertz. Provide railing for fly-wheel of stationary engine.
- No. 1239.—Shaw, Kendall & Co. Provide gates for all elevator openings; I find hot water or steam connections to sewers or soil-pipe—change all such connections as it is destructive to sewers.
- No. 1247.—F. N. Quale. Place protection in front of all exposed miter gearings on bolters and scalpers.
- No. 1248.—The Toledo Bolt and Nut Co. Provide a separate and distinct water-closet for exclusive use of females employed.
- No. 1249.—McConnell & Co. Case in pulleys and belts for driving brush machines; provide protection in front of exposed miter gearing on bolters and scalpers.
- No. 1250.—The Diamond Planing Mill Co. Provide all rip-saws and wood-shapers with guards.
- No. 1251.—Wm. Peter. Provide guards for all rip-saws and wood-shapers.
- No. 1252.—Erie Street Planing Mill. Provide guards for all rip-saws and wood-shapers.
- No. 1257.—George W. Thomas & Co. Provide bottom wheel of band-saw with a casing; casing or safety strip on front of top feed roll of sandpaper machine, casing or strip to be made of iron, bottom of same a little above bottom of top roll and so fastened that it will raise and lower with roll.
- No. 1258.—Herbert Baker. Provide covering for all tumbling mills so as to hold the dust; remove post under stairway in machine shop to prevent accident from being pinched between post and planer bed.
- No. 1259.—Tillinghast & Co. Building used as a tempering room and tempering furnace in an unsafe condition. Make such repairs on walls of building and furnace as will insure safety.

- No. 1260.—The C. H. Schroeder Co. Provide railing for fly-wheel of engine; guards for rip-saws and wood-shapers; elevator openings on each floor with gates.
- No. 1264.—The Union Manufacturing Co. Provide fly-wheel of engine for driving sewing-machine department with railing or casing; guards for rip-saws and wood-shapers; cover top and front of equalizing saws, extending covers as far down over front of saws as practicable; exhaust fan to carry away dust from emery-wheels.
- No. 1265.—The Buckeye Paint and Varnish Co. Provide elevator openings on each floor with gates; fly-wheel of engine with casing; additional means of escape from building in case of fire by erecting fire-escape on the outside of south side of building.
- No. 1266.—George Wilson & Sons. Provide fly-wheel of engine and main belt with a casing or railing; all rip-saws with guards.
- No. 1269.—B. A. Stevens. Provide all elevator openings with gates, and see that gates are kept closed when elevator is away from opening; all rip-saws and wood-shapers with guards; casing in front of bottom wheel of band-saw; casing or safety strip in front of top front feed-roll of sandpaper machine or wood-polisher, strip to be made of iron and so fastened that bottom of strip will be a little above bottom of top roll and raise and lower with same.
- No. 1270.—John S. Eck & Co. Provide fly-wheel of stationary engine with casing or railing; casing in front of main belt where it runs under pulley; all rip-saws and wood-shapers with guards; all shift-belts with shifters.
- No. 1273.—John Shepler. Provide guards for all rip-saws.
- No. 1278.—Toledo Knitting Co. Box shafting under knitting-machine tables.
- No. 1282.—A. Black & Co. Provide elevator openings on each floor with gates, independent of iron doors, and see that gates are kept closed when openings are not in use; casing in front of fly-wheel of stationary engine; box shafting under sewing-machine tables.
- No. 1283.—The Toledo Moulding Co. Provide all rip-saws with saw-guards.
- No. 1284.—The Gendon Iron Wheel Co. Provide a new cable for small elevator; casing in front of bottom wheel of band-saw; guards for wood-shapers; box shafting under sewing-machine tables.
- No. 1285.—Toledo Tobacco Pail Factory. Cover top and front of equalizing saws, covers extending down over front of saw as far as practicable; provide casing or safety strip in front of top front feed-roll of short planer, strip to be made of iron and so fastened that bottom of strip will be a little above bottom of top roll, thus preventing operatives from getting their hands between rolls.
- No. 1296.—C. Z. Kroh & Co. Provide self-closing gates for elevator openings on all floors; guards for rip-saws; casing in front of bottom wheel of band-saw. Complied.
- No. 1297.—Toledo Cot and Wringer Manufacturing Co. Provide casing for front of bottom wheel of band-saw; casing or safety strip in front of top front feed-roll, casing or strip to be made of iron and so fastened that bottom of strip will be a little above the bottom of top feed-roll, and raise and lower with same.
- No. 1298.—Tubular Axle Co. Provide casings in front of fly-wheels of stationary engine; elevator openings with self-closing gates, and wire netting between elevator shaft and stairway.
- No. 1299.—The Harris Metal Wheel and Tricycle Co. Provide fly-wheel of engine with casing or railing; elevator openings with self-closing gates, independent of iron doors; a light casing between elevator shaft and stairway, or a wire netting instead of casing; cover over head of wire straightening machine.
- No. 1305.—La Due & Moorman. Provide railing for fly-wheel of engine; cover top and

front of equalizing saws, cover to extend as far down over front of saw as practicable; cover top and front of swing-saw, cover extending well down over front of saw; place casing or safety strip in front of top front feed-roll of short planer, same to be made of iron and so fastened that bottom of strip will be a little over bottom of top roll, and so adjusted that strip will raise and lower with same.

- No. 1306.—Wabash Elevator (No. 3.) Provide better means of egress by erecting fire-escape.
- No. 1312.—Albert Neukom. Place protection in front of exposed gearing on hoisting machine.
- No. 1313.—The Ames-Bonner Co. Provide guards for all rip-saws; casing or safety strip in front of top front feed-roll of short planer, strip to be made of iron and fastened so that bottom of strip will be little above bottom of top roll, and so adjusted that same will raise and lower with roll; provide safety device for elevator to prevent cage from falling in case cable should break. Would suggest double cables; keep record of minors in your employ under the age of eighteen years.
- No. 1314.—Toledo Bending Co. Provide casing in front of bottom wheel of band-saw; guards for all rip-saws, guards now in use not sufficient.
- No. 1315.—John Morgan. Provide railing for fly-wheel of engine; belts necessary to be shifted with shifters; guards for all rip-saws.
- No. 1316.—Northwestern Elevator and Mill Co. Place protection in front of all exposed miter gearing on bolters and scalpers, protection to extend above third set of gearing from floor; cover miter gearing on line shaft for driving cleaning machine, top floor; place casing over large belt at foot of stairway in basement.
- No. 1319.—The Milburn Wagon Co. Provide guards for all rip-saws and wood-shapers; casing in front of bottom wheels of all band-saws, and in front of pulley and belt of small stationary engine; cover exposed gearing on sandpaper machine; provide casing or safety strip in front of top front feed-roll of sandpaper machine of wood-polisher, casing or strip to be made of iron and so fastened to the machine as to be a little above bottom of top roll and raise and lower with same; place casing or wire netting between stairways and elevator shafts.
- No. 1328.—The Dolphin Paint Co. Provide suitable means for properly heating building; erect balcony incline-ladder fire-escape on west side of building fronting on Summit street, balconies inclosing two windows, ladders passing down between same with outside hand-railings attached.
- No. 1329.—The Crescent Candy Co. Provide suitable means for properly heating building; springs for bottom gates at all elevator openings in order to be made self-closing; erect balcony incline-ladder fire-escape on west side of building fronting on Summit street, balconies to take in two windows, ladders running down on an incline between same, and provided with hand-railing on outside.
- No. 1330.—Toledo Overall Co. Box shafting beneath sewing-machine tables.
- No. 1331.—Fisk & Fisk. Provide belt shifters for belts necessary to be shifted; cover gearing and provide safety strip in front of top roll of Troy collar ironing machine, casing or safety strip to be made of iron and fastened to the machine a little above bottom of top roll.
- No. 1335.—Wabash R. R. Shops. See that guards for wood-shapers are kept in use; provide casing in front of bottom wheel of band-saw, and guards for all rip-saws.

- No. 1338.—Toledo Plow Works. Provide guards for rip-saw and wood-shapers; place casing in front of bottom wheel of band-saw, and some suitable protection to catch saw in case same should break or slip off bottom wheel.
- No. 1339.—The Jewel Manufacturing Co. Provide exhaust fan for purpose of carrying away dust from grinding, polishing and buffing-wheels; cover straightening head on wire straightening machine.
- No. 1341.—John B. Shepler. Place casing or safety strip in front of calender rolls, casing or strip to be made of iron and fastened to the machine so that bottom of strip will be little above bottom of middle or small roll; provide casing or railing for fly-wheel of engine and main belt, also casing in front of belt in rag engine room for driving shaft that drives paper machines; separate water-closets for the exclusive use of female employes.
- No. 1354.—Maumee Rolling Mill Co. Provide all exposed fly-wheels and gearing of small engines, shears, etc., with casings; casing in front of all roll couplings; cover top and front of cut-off saw, cover to extend as far down over front of same as practicable.
- No. 1358.—Crystal City Glass Co. Discharge the following-named boys, who are under twelve years of age, and now in your employ: Ernest Hayes, Allen Underwood, John Harrison, and keep record of minors in your employ under the age of eighteen years.
- No. 1359.—Buckeye Novelty Glass Co. Place casing in front of fly-wheel of stationary engine.
- No. 1360.—J. R. Hankey. Provide railing for fly-wheel of engine; guards for rip-saws, and insist that guards for wood-shaper be kept in use.
- No. 1361.—J. H. Bigelow. Provide guard for rip-saw; cover or guard over top and front of swing-saw, the cover to extend down over back and front of saw as far as practicable.
- No. 1362.—The Lythgoe Glass Co. Discharge the following-named boys under twelve years of age, whom I find in your employ: Park Giles and Teddie Bowen, and in no case employ minors under twelve years of age; keep record of all minors in your employ under eighteen years of age.
- No. 1363.—Bowling Green Window Glass Co. In no case allow minors in your employ, who are under the age of eighteen years, to work more hours than ten in any one day or night; provide casing in front of fly-wheel of stationary engine.
- No. 1364.—Cramer & Reider. Provide casing or railing for fly-wheel of stationary engine, at least three feet in height.
- No. 1368.—The Dewey Stave Co. Provide suitable protection over large bolting saw.
- No. 1372.—The North Baltimore Bottle Glass Co. You will discharge the following-named boys under the age of twelve years, whom I find in your employ: Reuben Nigh, George Lynn, Edward Smith, Willie Nigh and Fred. Nigh, and in no case employ minors under the age of twelve years; keep record of all minors in your employ under the age of eighteen years.
- No. 1373.—A. Barnd. Provide guards for all rip-saws used in your establishment.
- No. 1376.—Bushon & Crawford. Place casing in front of bottom wheel of band-saw; also in front of main belt, second floor; provide guards for all rip-saws.
- No. 1377.—Palmer & Arnold. Provide fly-wheel of stationary engine with casing or railing; cover exposed gearing on centrifugal seal.
- No. 1378.—Findlay Lumber and Wood-working Co. Provide all belts necessary to be shifted with shifters; all rip-saws with saw-guards.
- No. 1379.—W. H. Campfield & Son. Provide fly-wheel of stationary engine with railing or casing; guards for rip-saws and wood-shapers.

- No. 1386.—Findlay Rolling Mill Co. Discharge the following-named boys under the age of twelve years, whom I find in your employ: Ernest Paxter and Stacey Stutt; keep record of all minors in your employ under the age of eighteen years; provide railing for fly-wheel of stationary engine; rip-saw with a saw-guard.
- No. 1387.—The Findlay Window Glass Co. Place cover over top of swing-saw, the same to extend as far down over front of saw as practicable.
- No. 1388.—C. D. Hayward & Co. Provide railing or casing, for fly-wheel of stationary engine; casing in front of bottom wheel of band-saw, and a protection of some character to catch saw should it break or slip off top wheel; guards for all rip-saws.
- No. 1389.—Buckeye Window Glass Co. Cover top and front of swing-saw, the same to extend as far down over front of saw as practicable.
- No. 1390.—The Findlay Iron and Steel Co. Provide wheel in front of fly-wheel of shears; cover over top of cut-off saw; fly-wheels of engines for driving ten and sixteen-inch mills with railing or casing.
- No. 1391.—W. P. Dukes. Provide guards for all rip-saws and wood-shapers; casing in front of bottom wheel of band-saw.
- No. 1392.—The Bellaire Goblet Co. Discharge from your employ Willie Allen, who is under twelve years of age, and in no case employ minors under that age; keep record of all minors in your employ under eighteen years of age; provide fly-wheel of stationary engine with railing or casing.
- No. 1393.—Dalzell, Gilmore & Leighton Co. Discharge from your employ Carl Baker, Albert Hammond, Isaac Graham and Ross Hutchinson, who are under twelve years of age; keep a record of all minors under eighteen years of age in your employ; provide fly-wheel of stationary engine with railing or casing.
- No. 1394.—Model Flint Glass Co. Provide fly-wheel and main belt of stationary engine with a railing or casing; elevator opening on top floor with self-closing gate.
- No. 1395.—Findlay Clay Pot Co. Provide a casing in front of fly-wheel of stationary engine.
- No. 1396.—The Findlay Hydraulic Pressed Brick Co. Place railings or casings in front of fly-wheels of engines and belts driving blowers; would suggest that a large ventilator be placed in roof of engine room.
- No. 1397.—Findlay Stave and Handle Co. Provide guard for rip-saw.
- No. 1398.—The Findlay Church Furniture Co. Provide guards for all rip-saws and wood-shapers; casing in front of bottom wheel of band-saw.
- No. 1399.—Findlay Table Manufacturing Co. Place casing or safety strip in front of top front feed-roll of sandpaper machine, casing or safety strip to be made of iron and so fastened to machine that bottom of strip will be a little above bottom of top roll and raise and lower with roll; provide all rip-saws with saw-guards.
- No. 1400.—Vance & Bigelow. Place casing in front of bottom wheel of band-saw; provide guard for rip-saw.
- No. 1401.—Ohio Lantern Co. Provide additional means of escape from building in case of fire by erecting balcony incline-ladder fire-escape on north side of building, fronting on Lima avenue, or by providing another stairway from bottom to top floor in the extreme north end of building. Should the outside fire-escape be preferable, the balconies must inclose two windows and ladders pass down between same on an incline, and be provided with outside hand-railing.

- No. 1404.—David Round & Son. Provide stationary engine with casing or railing.
- No. 1405.—Shull & Parker. Provide wood-shaper with a guard, and see that saw-guard is kept in use on rip-saw.
- No. 1406.—Funk & Latshaw. Provide guard for rip-saw; place casing in front of bottom wheel of band-saw.
- No. 1407.—Adams Brothers. Provide guards for rip-saws; place casing in front of bottom wheel of band-saw.
- No. 1410.—Waltz, Barr & Co. Place casing over belt driving wheat cleaner.
- No. 1411.—The Lippencott Glass Co. Under no circumstances allow any person or persons to ride on elevator until the same has been provided with some suitable safety device to prevent cage from falling in case rope should break. Would suggest double ropes. Provide elevator opening at top floor with self-closing gate, and place casing in front of main belt from engine to line shaft.
- No. 1412.—John Shull Novelty Works. Provide casing in front of bottom wheel of band-saw and in front of fly-wheel of engine. Complied.
- No. 1413.—McManness & Seymour. Provide guards for all rip-saws used in your establishment.
- No. 1416.—The Findlay Bottle Co. Discharge from your employ Joseph Faulk, a minor under twelve years of age; keep record of all minors in your employ under the age of eighteen years.
- No. 1417.—David Kirk. Place suitable protection in front of all exposed miter gearing on bolters.
- No. 1418.—The Wetherald Wire Nail Co. Provide casing or railing for stationary engine.
- No. 1421.—Brown, Bonnell & Co. Provide fly-wheel and connecting rod pit of engine, in No. 1 mill, with railings; stairway from ground to top of Phoenix furnace. Complied.
- No. 1427.—Heller Brothers. Provide guards for wood-shaper and rip-saw on second floor, the same as used on floor below.
- No. 1428.—The Lloyd-Booth Co. Provide casing or railing for fly-wheel of stationary engine; also casing in front of bottom wheel of band-saw.
- No. 1433.—Forsyth Scale Co. Provide saw-guard for rip-saw.
- No. 1434.—A. S. Williams. Provide guards for rip-saw and wood-shaper; casing in front of bottom wheel of band-saw.
- No. 1435.—Hem Rod Furnace. Provide an iron stairway from ground to top of elevator, in order that employes will not be compelled to ride on elevator; platform around engines about as high as the top of fly-wheel of blast engines, to be used by the engineer when oiling.
- No. 1436.—Youngstown Lumber Co. Provide all belts necessary to be shifted with shifters; wood-shaper with guard, and see that saw-guard is kept in use at all times when practicable.
- No. 1441.—Youngstown Steam Laundry. Provide casing or safety strip in front of top front feed-roll of Torney ironing mangle, strip to be made of iron and so fastened to the machine that it will raise and lower with roll, and strip will be a little above top of same.
- No. 1442.—Brier Hill Iron and Coal Co. Provide a railing on the outside of stairway and landings of same to top of Grace furnace.
- No. 1443.—Youngstown Steel Co. Provide fly-wheel of stationary engine for driving blowers with railing, and cover exposed gearing on engine for driving revolving furnace.

- No. 1444.—Homer Baldwin. Cover exposed gearing on smooth rolls, and provide suitable protection in front of all exposed gearing on bolters and scalpers.
- No. 1445.—Mahoning Valley Iron Co. Provide fly-wheel of all engines, shears, etc., with railings or casings, and cover all exposed gearing on straightening machine in shafting department.
- No. 1446.—American Tube and Iron Co. Cover all exposed gearing on pipe-cutting and threading-machines. Complied.
- No. 1448.—Youngstown Car Manufacturing Co. Provide all fly-wheels of engines with railings; casing in front of bottom wheel of band-saw, and see that saw-guard is kept in use at all times when practicable.

SECOND DISTRICT.

ATHENS COUNTY.

ATHENS.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.		For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	
584	The Athens Messenger.....	Court street.....	Printing, etc.....	6		
585	Hocking Valley Printing and Pub. Co.....	Washington street.....	" and publishing.....	4	1	
586	The Athens Journal.....	Court street.....	" etc.....	6	4	
587	Gutcheon & Connett.....	Near C. W. & B. R. R.....	Doors, sash, etc.....	4		
588	George Filcon.....	Union street.....	Wagons, etc.....	12		See No. 588.
589	Crippen Brothers.....	".....	".....	7		
590	Athens Water Wheel and Machine Co.....	Near C. W. & B. R. R.....	Excelsior machines, etc.....	20		See No. 589.

NELSONVILLE.

591	Nelsonville Foundry and Machine Co.....	Chestnut street.....	Machinery, etc.....	40		
592	Nelsonville Planing Mill Co.....	Walnut ".....	Building material.....	10		
593	M. Kreig & Son.....	Near depot.....	Doors, sash, etc.....	4		

DELAWARE COUNTY.

DELAWARE.

236	Clark & Young.....	Main street and Bee Line R. R.....	Doors, sash, etc.....	10		See No. 236.
237	Riddle, Graft & Co.....	".....	Cigars.....	51	58	6
238	F. T. Evans.....	12 North Main street.....	Book and job printing.....	6	1	
239	Delaware Gazette.....	25-27 Main street.....	Printing.....	9	3	
240	L. Miller.....	East Hunter street.....	Carriages and buggies.....	25		
241	W. W. Hutchinson.....	Main street.....	buggy gearing.....	5		
242	Co-operative Cigar Co.....	".....	Cigars.....	12	1	
243	Sauer, Factor & Co.....	".....	".....	3	1	

244	J. Hessemaier.....	North Main street.....	Cigars.....	12	1	
245	E. B. Standish.....	".....	Candy.....	4	2	
246	E. B. Standish.....	Central avenue.....	Printing.....	5		
247	E. Snyder.....	"..... and Henry street.....	Flour, etc.....	10		See No. 247.
248	Delaware Chair Co.....	Flax street.....	Chairs.....	160	10	
249	George H. Alkin.....	110 East Williams street.....	Laundrying.....	5	4	
250	C. C. & I. R. R. Shops.....	Near depot.....	Railroad repairs.....	165		See No. 249.
251	J. L. Slough & Sons.....	17 North Henry street.....	Flour, etc.....	3		
252	M. Neville.....	Main street.....	Carriages and buggies.....	7		

FAIRFIELD COUNTY.

BALTIMORE.

543	Keller & Alt.....	Near depot.....	Doors, sash, etc.....	5		See No. 543.
544	Baltimore Bent Works.....	Near railroad.....	Bent works.....	12		" 544.

LANCASTER.

551	James McAnespie & Co.....	Broad street.....	Blankets, flannels, etc.....	16	6	See No. 551.
552	W. F. Dennis.....	Canal.....	Flour, etc.....	3		
553	Eagle Machine Co.....	Foot of Main street.....	Agricultural implements.....	95	5	
554	J. B. Orman & Brothers.....	Mulberry street.....	Doors, sash, etc.....	12		
555	Sliford & Shultz.....	Mill and Canal streets.....	".....	4		
556	Lancaster Republican.....	Main street.....	Printing, etc.....	6		
557	Ohio Eagle.....	".....	Merchant tailoring.....	8	5	
558	Peter Miller & Co.....	Opposite depot.....	Railroad repairs.....	9		
559	C. & M. V. R. R. Shop.....	Main street.....	Steam and gas fitting.....	40		
570	Lutz & Bauman.....	".....	Iron bridges.....	6		
571	August Borneman.....	South High street.....	Agricultural implements.....	5		
572	Hocking Valley Manufacturing Co.....	".....	".....	90		

SUGAR GROVE.

603	C. F. Bauer.....	Near Canal.....	Flour and feed.....	2		
604	A. Schwenke.....	".....	Oak harness leather.....	9		See No. 604.

FAYETTE COUNTY.

WASHINGTON C. H.

312	Fayette Grain and Feed Co.....	Near C. & M. V. R. R.....	Grain elevator.....	3		
313	Lynn, Risor & Co.....	Near railroad.....	Shoes.....	8		
314	Ludlow Soap Manufacturing Co.....	Near C. & M. V. R. R.....	Soap.....	8	2	See No. 314.
315	Martin Grove.....	Sycamore street.....	Doors, sash, etc.....	14		" 315.

WASHINGTON C. H.—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	Minors.	
316	Fayette County Herald	Main street	Printing, etc.	8			
317	Cyclone Publishing Co.	Court street	News and job printing	10			
318	E. G. Tutbill	Fayette street	Carriage and buggy	13			
319	Purcell and Netherhouse	"	Letter file and etc.	3			
320	J. D. Struckey Milling Co.	"	Flour and feed	5			
321	Hare & Co.	27 East street	Ladies and children's shoes	25	20	15	
322	White & Ballard	Main and East streets	Laundrying	2	8		
323	Jenny & Manning	Court street	Ladies and children's shoes	50	48	14	
324	McCoey & Stuckey	East street	Foundry and machine shop	8			
325	Morrow Bros. Manufacturing Co.	Near railroad	Grain elevator	3			
326			Bridge collars and coach pads	3			

FRANKLIN COUNTY.

COLUMBUS.

1	Edison Electric Light Co.	Third and Gay streets	Electric light.	15	1		See No. 1.
2	Reed Jones & Co.	179 North High street	Shoes	44	38	4	
3	W. H. Field Manufacturing Co.	North Third street, opposite depot.	Carriage hardware	35			
4	Pan Handle R. R. Shops	Northeast part of city	Railroad shops	1170			See No. 4.
5	Capital City Carriage Co.	Northeast of U. S. Barracks	Carriages and buggies	90	1		
6	Columbus Bridge Co.	"	Bridges	15			
7	A. O. Jones	Stanton street	Sewer-pipe, etc.	10			
8	Charles Guthrie	East Fulton street	Doors, sash, etc.	10			
9	Columbus Knitting Co.	New and Thurman streets	Hosiery	1	25	3	See No. 9.
10	H. Behren	South Fifth street	Brooms	8	2	1	
11	P. Mueller	South Third street	Cigars	5			
12	A. F. Zink	South Fifth street	Brooms	5			
13	Armbruster & Elsel	New street	Cigars	4		1	
14	McDonald & Bro.	Liberty street	Iron castings	4			
15	Noehl Brothers	High and Beck streets	Wagons and buggies	14			
16	Vogelsgang Furnace Co.	South High, near Beck	Warm air furnaces	15			
17	L. Buchsels & Son	Front and Blankner streets	Harness leather	10			
18	Ohio Plating Works	South Scioto street, near Fulton	Silver and nickel-plating	8			
19	Smith & Aman	Mound and Wall streets	Plows	10			
20	Ph. Kinzel	Mound and Front streets	Edge tools	6			See No. 19.
21	Thomas Lewis & Sons	Mound and Canal streets	Pulled wool, etc.	7			

22	Schauwaker Brothers.....	Mound and Canal streets	Oak harness leather	45
23	A. H. Fowell.....	Rich and Fourth streets	Doors, sash, etc.	2
24	William Armbruster.....	182 South High street	Hosiery	4
25	Loeb & Wels.....	328-330 South Fourth street	Figures	11
26	A. & D. Krumm.....	Fourth street south of Main	Iron fences	6
27	F. F. Carrige Co.....	Market street near Town	Coffrages and buggies	95
28	S. F. Kerner.....	23 East Third street	Coffee and spices	3
29	S. B. Kottla.....	23 East Main street	Stogies and cigars	2
30	S. B. Harshman.....	East Main street	Soda and mineral waters	80
31	Peter Schille.....	Town and Third streets	Machine repair shop	10
32	S. P. Elliott Sons.....	South Pearl street	Cracker bakery	3
33	The Columbian Printing Co.....	111 South Pearl street	Printing, etc	4
34	T. G. Palmer.....	115	Printing	25
35	Sunday Herald.....	13 South Pearl street	Laundrying	7
36	Capital City Laundry.....	85 West Broad street	Machinery	13
37	E. E. Eaton.....	13 South Scioto street	Steam pumps	5
38	J. E. B. Pulling.....	20	Boats, cars, etc.	6
39	W. H. Rhoads & Son.....	37	Crackers, etc.	4
40	Coleman & Felber.....	South High street	Carriages and buggies	18
41	W. & E. Hays.....	203 East Town street	Printing and binding	15
42	Lutheran Book Concern.....	208 South High street	Printing, etc	6
43	Ohio Law Journal.....	208	Printing, etc	10
44	Westbore Printing Co.....	53 South Wall street	Soda and mineral water	7
45	Grant & Upton.....	21-31	Printing and electrotyping	50
46	Central Press Association.....	Broad and Wall streets	Paints and electrotyping	1
47	O. R. Hanna & Abbott.....	120 South Front street	Stogies and cigars	43
48	B. B. Anderson & Co.....	122	Brooms	5
49	Eagle Broom Co.....	121	Cigars	2
50	E. C. Bach.....	Metropolitan Opera Block	Book binding	15
51	Siebert & Lilley.....	216 South High street	Mantels and tinware	10
52	W. H. Aiken & Son.....	172 South High street	Upholstering	7
53	Columbus Cabinet Co.....	Foot of Fulton street	Harness, etc	14
54	J. H. & F. A. Sells.....	215 South High street	Stoves and castings	18
55	C. Emrich.....	42-46 West State street	Furniture	2
56	Halim, Bellows & Co.....	Foot of State street	Ladies' and children's shoes	60
57	Henry C. Godman.....	47 East State street	Builders' supplies	27
58	W. F. Andrus.....	78 South Front street	Printing and publishing	1
59	Peter Schlapp.....	State and Wall streets	Gas and steam-fitting	5
60	Ohio State Journal.....	North Sixth street	Laundrying	25
61	The Automatic Water-Closet Co.....	28 North Fifth street	Brooms	30
62	The A. Schwarz Plumbing Co.....	276-286 North Third street	Mill machinery	85
63	Columbus Steam Laundry.....	Third and Naghten streets	Carriage wood-work	50
64	E. D. & J. C. Howard.....	352-356 North Third street	Carriages and buggies	6
65	Case Manufacturing Co.....	276-284 North Fourth street	Elevators, fire-escapes, etc.	25
66	J. W. Dann Manufacturing Co.....	232 North Fourth street	Tin stamping	6
67	Scioto Buggy Co.....	33 West Spring street	Carriages and buggies	36
68	C. E. Morris.....	Lynn and Pearl streets	Coach and carriage lamps	50
69	Wm. A. Gill & Co.....	Long and Pearl streets	Cigars	8
70	Columbus Dash and Wagon Co.....		Job printing	2
71	M. T. Gleason.....		Trunks, valises, etc.	4
72	Inter-State Cigar Co.....			5
73	Nitschke Brothers.....			15
74	J. A. Vandegriff.....			

117	J. J. Marvin	Spring and Water streets	Doors, sash, etc.	6		See No. 118.
118	Slade & Kelton	West and Randolph streets	Flooring, siding, etc.	60	12	" 119.
119	Cummings & Ogier	160 West Locust street	Malleable iron	55		" 120.
120	Kellon & Brown	Chestnut and Water streets	Doors, sash, etc.	25		
121	Vulcan Iron Works	Foot of Randolph street	Machinery, etc.	50	5	
122	Columbus Bolt Works		Bolts, nuts, etc.	100		See No. 123.
123	Watkins & Co.	Randolph and West streets	Doors, sash, etc.	27		" 124.
124	Dunden & Bergin	Naghten and West streets	Flooring, siding, etc.	6		
125	James Pleukarp & Co.	Lazelle and Goodale streets	Tables, table slides, etc.	30		
126	P. R. Winget	526 North High street	Saws	5		
127	Columbus Soap Works	Factory street and First avenue	Soap	30	35	
128	Wassell Fire-Clay Co.	Factory street and Butties avenue	Fire brick, etc.	5		
129	E. N. Hatcher	Factory and Collins streets	Steel wago skels	40		See No. 125.
130	Columbus Coffin Co.	Factory street and Butties avenue	Coffin and burial cases	70		
131	M. F. Shilling	Henry and Dodge streets	Casting	45	15	
132	Capital City Dairy Co.	Spruce street and Demmon avenue	Butterine	12		
133	Columbus City Manufacturing Co.	Park and Vine street	Cigars	20	35	
134	Frederick Seat Co.	North Park street	Buggy seats	25	7	See No. 135.
135	H. P. Minot	Vine street	Machinery	9		
136	Kessler Dry Hop Yeast Co.	22 East Fourth avenue	Dry hop yeast	3		
137	Fish Pressed Brick Co.	Fifth avenue and Bee Line crossing	Pressed brick	20		
138	Wm. C. Reynolds & Co.	West end Broad street bridge	Vehicle dashes	30	20	
139	G. Schreyer	210 West Broad street	Wagon skels, etc.	3		
140	Door, Sash and Lumber Co.	West Broad street	Doors, sash, etc.	110	12	See No. 141.
141	J. W. Zentmyer	Broad and Bell streets	Spring wagons, etc.	6		
142	P. Shart	222 West Broad street	Machinery	5		
143	Columbus Machine Co.	15 East Gay street	Engines and furnaces	90		
144	Saturday Toller	39 South Wall street	News paper and job printing	6		
145	W. G. Hubbard & Co.	Broad and Center streets	Printing, etc.	4	2	
146	Pleukarp Caster Co.		Bed and table casters	3		
147	Jeffrey Manufacturing Co.	Broad and Levee streets	Chains	25	4	See No. 146.
148	John Schenck	29-31 South Wall street	Steam pumps, etc.	4		
149	J. C. Taylor	Levee street near Broad	Printing and electrotyping	4		See No. 150.
150	Central Press Association	34 South Levee street	All kinds wood-work	48		
151	D. & R. Brown	West end State street bridge	Flour and feed	5		See No. 152.
152	Hilbreth & Martin	State and Center streets	Doors, sash, etc.	40		
153	Jeffrey Manufacturing Co.	West Mound street	Coal mining machinery	45		
154	Butler, Crawford & Co.	West Mound street	Coffee, spices, etc.	40	20	
155	E. Bick & Son	S. W. of C. H. V. & T. Shops	Hides and tallow	3		
156	Eagle Foundry	West Main street	Gray iron castings	15		
157	Franklin Furnace	West Main street	Pig-iron	75		
158	George Janton & Co.	West Mound street	Oils, soap, etc.	14		
159	E. H. Shoemaker & Sons	West Mound street	Lubricating oils	6		
160	Miller Oil Co.	Main street and Short alley	Grain elevator	7		
161	Medford & Kelley	West Main street	Paper	20	7	
162	Yeatman Anderson	South of West Mound street	Railroad repairs	400		
163	C. H. V. & T. R. Shops	Mound street and Short alley	Furniture	85	4	
164	Columbus Cabinet Co.	331 South High street	Tailoring	7		
165	Miller Merchant Tailoring Co.	"	"	8	4	
166	William Hegelheimer	299	"	8	2	
167	Christian Hertenstein	High and Rich streets	Book and job printing	5	1	See No. 169.
168	Gazette Printing Co.	141 South High street	Tailoring	20	2	
169	S. W. Stimson & Sons			25	1	

COLUMBUS—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	Minors.	
171	Ohio Merchant Tailoring Co.....	49 South High street.	Tailoring.....	13			
172	S. Lazarus' Sons & Co.....	Deahler Block, North High street.	"	20	5		
173	Metropolitan Clothing Co.....	155 North High street.	"	6	6		
174	Goodman & Co.....	288	"	15	15		
175	Chas. Augustus & Co.....	182	"	12	10		
176	J. A. McAuley.....	176-178	Tents, awnings, etc.....	5	12		
177	F. W. Wohlleben.....	174	Tailoring.....	4	5		
178	M. Burns.....	74	Book-binding.....	6	4		
179	William Brain.....	51 East State street.....	Book-binding.....	3	1		
180	Sunday Morning News.....	57	Millinery, etc.....	5			
181	A. E. Davis.....	128 South High street.....	Millinery, etc.....	7	20		
182	Columbus Sewer Pipe Co.....	North Columbus	Wheelbarrows.....	100			
183	Kilbourne, Jacobs & Co.....	Lazelle and Goodale streets	Round scrapers, etc.....	425		16	
184	Kilbourne, Jacobs & Co.....	Foot of Lincoln street.	Regalia and society supplies.....	170	250	20	
185	M. C. Lilley & Co.....	29-17 West Gay street.	Dry goods, etc.....	23	12	7	
186	W. G. Dunn & Co.....	84-86 North High street.	Carpets and curtains.....	20	10		
187	Bowe & Baggs.....	31-38	Dry goods and notions.....	3			
188	P. H. Vogel.....	241 East Main street.....	"	3			
189	Louis Lind.....	226	"	5		1	
190	G. Maier.....	167	"	4		2	
191	I. Schenckler & Bro.....	153	"	3		1	
192	J. & F. Dotter.....	140	"	8			
193	Seiter Brothers.....	Main and High streets.	carpets, etc.	3	1		
194	J. P. Wolsman.....	274-278 South High street.	notions, etc.	9	10	3	
195	M. J. P. Wolsman.....	146	etc.....	15	16		
196	Mier & Berland.....	130-124	"	9	7		
197	Price, Ross & Co.....	105 North	"	9	13	4	
198	Geo. S. Hall.....	97	curtains, etc.	17	17	8	
199	Samuel D. Cheseldine.....	75	notions, etc.	7	3		
200	Andre Dobbie.....	19-21 South	"	10	12	2	
201	Staley, Morton & Butler.....	Met. Opera House, South High street.	"	14	16		
202	Columbus Wire Works.....	17 West Spring street.	Wire novelties, etc.	3			
203	W. W. McCallip.....	25	Iron fencing.	4			
204	Chas. & Rose.....	High street, north of depot.	Feed and chop.	2			
205	R. O. Smith & Co.....	478 North High street.	Flooring, siding, etc.	10			See No. 205.
206	Thos. G. Neski & Co.....	639	Gas and steam fitting	10			
207	Columbus Supply Co.....	161	"	3			
208	Orris & McKelvey.....	1038	Book and job printing	3			
209	Snider, Renner & Dill.....	1023-1027	Candy.....	9	3		See No. 209.
210	A. C. Berlin & Co.....	31-33	Book and job printing	16			
211	Sunday Capital.....	Rear 45 West Gay street.	Newspaper printing	9			

212	Capital City Mantel Works.....	67-69 North Front street.....	12			
213	H. A. McCune.....	Hanford Lane.....	4			See No. 213.
214	Columbus Electric Light and Power Co.....	7 North Frank street.....	4			" 214.
215	Columbus Watch Co.....	79 East Turman street.....	200	115	20	
216	Newark Machine Co.....	North of West Broad, West Side.....	150	25		See No. 216.
217	Col. J. W. Starch Co.....	South High street.....	100	2		
218	Col. Steam Beating and Renovating Co.....	East Main street.....	4			See No. 218.
219	J. F. Schmidt.....	Main street and Miller avenue.....	4			
220	Moditt & Uffin.....	262-264 South High street.....	12	7		
221	John A. Pfeiffer.....	265-276 1/2.....	11	3		
222	Baker's Art Gallery.....	Metropolitan Opera House.....	10	3		See No. 222.
223	Turpin & Co.....	112 South High street.....	1	9		
224	W. F. Mann.....	17-19 East Rich street.....	3			
225	Columbus Portland Cement Co.....	Fifth avenue and Bee Line Railroad.....	20			See No. 700.
226	Jerry P. Bliss.....	66 South High street.....	11			" 701.
227	Ohio Pipe Works.....	Factory street.....	175	2		" 702.
228	Jeffrey Manufacturing Co.....	East First avenue.....	90	8		

WESTERVILLE.

229	Joseph Porter.....	Near depot.....	3			See No. 226.
230	H. L. Bennett.....	Main street.....	5			
231	Public Opinion.....	State and Main streets.....	4	2		
232	Adams & Davis.....	Main street.....	3			
233	Ira Hartrum.....	State street.....	2			
234	John Oiler.....	".....	2			
235	W. S. Clymer.....	".....	2			

CANAL WINCHESTER.

573	M. C. Whitehurst & Sons.....	Flour, etc.....	5			
574	O. P. Chaney & Son.....	Grain elevator.....	4			
575	George F. Barels.....	Doors, sash and lumber.....	5			
576	George Powell.....	Drain tile.....	6			

GALLIA COUNTY.

GALLIPOLIS.

648	Mullineux Bros.....	Doors, sash, etc.....	10			See No. 648.
649	Bush Son & Miller.....	Meal, feed, etc.....	5			" 649.
650	Morrison & Humphrey.....	Lumber.....	4			" 650.
651	Kling & Co.....	Stoves, etc.....	20			
652	The Miller & Hutinspillar Co.....	Packing furniture, etc.....	4	9		
653	Encs Hill & Co.....	Foundry work.....	25			See No. 653.
654	F. W. Dages.....	Stoves, etc.....	15			

GALLIPOLIS—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	Minors.	
655	Eureka Mill Co.	Third and Grape streets	Flour, etc.	5			
656	S. F. Neal (Anchor Mill)	Vine street.	"	10			
657	August Uermann.	"	Oak harness leather.	14			
658	Gatewood Lumber Co.	East Front street	Furniture, etc.	15		3	See No. 658.
659	The Fuller & Hutsinpillar Co.	State street, near Fourth	Furniture.	80		21	
660	A. A. Lyon.	Second street.	Carriages, etc.	6			

GUERNSEY COUNTY.

CAMBRIDGE.

548	T. M. McFarland & Co.	Near depot.	Flour and feed.	6			See No. 548.
549	The Cambridge Roofing Co.	Near B. & O. R. R.	Patent steel roofing.	6			
550	Cambridge Roofing Co.	"	Spokes, handles, etc.	20			See No. 550.
551	Cambridge Chair Factory.	Third and Gomer streets.	Cane chairs.	60	40	35	
552	Simons Brothers.	Gaston avenue.	Foundry.	6			
553	E. McTollum.	Eighth street.	Wagons and buggies.	3			
554	C. & M. R. R. Shops.	East Cambridge.	Railroad repairs.	55			
555	Hoyle & Scott.	Third street and Wheeling avenue.	Doors, sash, etc.	10			
556	Guernsey Times.	Wheeling avenue.	Printing.	6	2		

QUAKER CITY.

557	Quaker City Window Glass Co.	Near B. & O. R. R.	Window glass.	75		10	
558	G. W. Couiter.	Pike street.	Doors, sash, etc.	8			See No. 558.
559	John R. Hall.	Near B. & O. depot.	Flour and feed.	3	2		
560	Max Brothers.	Main street.	Cigars.	6		1	

HOOKING COUNTY.

LOGAN.

594	Frank Kessler.	Gallagher avenue.	Doors, sash, etc.	6			See No. 594.
595	Republican Gazette.	Main street.	Printing, etc.	6	1		

586	The Ohio Democrat.....	Market street.....	Printing, etc.....	5
587	The Hocking Sentinel.....	Main street.....	Printing.....	4
588	Reynes & Wellman.....	Front street.....	Flour, etc.....	9
589	The Logan Woolen Mills.....	Front and Mulberry streets.....	Blankets, etc.....	7
590	The Logan Manufacturing Co.....	East Front street.....	Furniture, etc.....	3
591	C. H. V. & T. E. R. Shops.....	Near depot.....	Railroad repairs.....	50
592	Motherwell Iron & Steel Co.....	Near railroad.....	Bridges, etc.....	45
				75

JACKSON COUNTY.

JACKSON.

606	Tropic Iron Co.....	Near railroad.....	Pig-iron.....	30
606	May Brothers.....	Broad street.....	Cigars.....	3
607	Jackson Standard Journal.....	Main street.....	Printing, etc.....	6
608	Jackson Herald.....	".....	".....	2
609	Ruf. Leather Co.....	Water street.....	Oak harness leather.....	14
610	Peters & Huntsinger.....	Locust and Water streets.....	Flour, meal and feed.....	2
611	John Dauber.....	Main and Railroad streets.....	Furniture, etc.....	4
612	Franklin Mill Co.....	Water street.....	Flour, etc.....	6
613	Globe Iron Co.....	Near C. W. & B. R. R.....	Pig-iron.....	30
614	Jackson Electric Light Co.....	James street.....	Electric light.....	3
615	Star Furnace Co.....	Near C. W. & B. R. R.....	Pig-iron.....	30
616	Jackson Mill and Lumber Co.....	Chillicothe street.....	Doors, sash, etc.....	8
617	Buckeye Mill and Lumber Co.....	West Main street.....	".....	8
618	Franklin Mill Co.....	Water street.....	Blankets, flannels, etc.....	6
				5
				6
				617
				618

WELLSTON.

619	Hahn, Kruskamp & Murphy.....	Pennsylvania avenue.....	Flour, etc.....	7
620	A. B. Leach.....	Powell avenue.....	Doors, sash, etc.....	10
621	Wellston Argus.....	Broadway.....	Printing, etc.....	4
622	Milton Furnace.....	Near railroad.....	Pig-iron.....	32
623	Wellston Foundry and Machine Works.....	".....	Foundry and machine work.....	45
				See No. 619.
				" 620.

KNOX COUNTY.

CENTERBURG.

289	The Centerburg Agitator.....	East Main street.....	Printing, etc.....	3
290	J. E. Landrum & Co.....	West of town.....	Drain tile.....	1
291	Grant & Cook.....	Near Main street.....	Sawing lumber.....	10
292	Centerburg Manufacturing Co.....	" C. A. & C. R. R.....	Wheat scouers.....	4
293	William Smith.....	".....	Grain elevator.....	5
294	Charles Bishop.....	".....	Flour, feed, etc.....	2
				3
				See No. 292.

MT. VERNON.

Number	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	Minors.	
445	C. A. & C. R. R. Shops.....	East of city.....	Railroad repairs.....	125			
446	E. L. Black.....	Near C. A. & C. R. R. depot.	Plows and castings.....	4			
447	The Cooper Manufacturing Co.....	Main street.....	Engines and saw-mills.....	45			
448	Mt. Vernon Bridge Co.....	Near B. & O. R. R.....	Iron bridges.....	100			
449	Kokosing Mills.....	".....	Flour, etc.....	20			
450	Eagle Mills.....	Vine street.....	Flour.....	4			
451	S. H. Jackson.....	".....	Carriages and buggies.....	4			
452	Mt. Vernon Lined Oil Co.....	Front street.....	Lined oil, etc.....	5			
453	C. & G. Cooper.....	Sandusky and Sugar streets.....	Saw-mills, etc.....	190			
454	Mt. Vernon Steam Laundry.....	Foot of Gay street.....	Laundrying.....	8	7		
455	Democratic Banner.....	Monument Square.....	Printing.....	4			
456	Mt. Vernon Republican.....	14 Main street.....	".....	6	2		

LAWRENCE COUNTY.

IRONTON.

624	C. H. Crowell.....	Near river.....	Lumber.....	12			
625	D. Ft. W. & C. R. R. Shop.....	East Second street.....	Railroad repairs.....	25			
626	Phillips Carriage Works.....	Second and Mulberry streets.....	Carriages and buggies.....	10			
627	The Foster Stove Co.....	East Third street.....	Stoves and ranges.....	80			See No. 628.
628	Witman Stove Co.....	East Ironton.....	".....	60			
629	Sarah Furnace.....	Near Ironton.....	Pig-iron.....	50	5		
630	Standard Gas Retort and Fire-Brick Co.....	Near railroad, east end.....	Gas retorts, etc.....	25			
631	Etna Furnace.....	East Ironton.....	Pig-iron.....	100			
632	Ironton Fire-Brick Co.....	".....	Fire-brick.....	30			
633	R. N. Fearon.....	Near river.....	Lumber.....	12			
634	Ironton Lumber Co.....	".....	".....	6			
635	The Kelly Nail and Iron Co.....	".....	Steel, nails, etc.....	275	100		
636	Newman & Spanner.....	".....	Lumber.....	60			See No. 636.
637	Ironton Furnace Co.....	Front street near river.....	Pig-iron.....	50			
638	Ironton Carriage Works.....	Etna street.....	Carriages and buggies.....	6			
639	Ironton Soap Works.....	Eighth street.....	Soap.....	4			
640	Daily Irontonian.....	Second street.....	Printing, etc.....	7			
641	The Ironton Republican.....	Center street.....	Printing.....	4	4		
642	Ironton Register.....	Second street.....	".....	7			

643	Lawrence Iron and Steel Co.	West Second street.	Iron and steel.	300		
644	Lambert Bros. & Co.	Second street.	Furnace machinery, etc.	50		
645	R. S. Dupuy	Railroad street.	Oak harness leather.	11		See No. 645.
646	Eagle Brewery	Seventh and Railroad streets.	Beer, etc.	10		
647	The Goldcamp Milling Co.	Front street.	Flour, etc.	9		See No. 647.

LICKING COUNTY.

NEWARK.

420	Charles Kibler, Jr. & Co.	B. & O. R. R. north of city.	Stoves	45		See No. 420.
421	Newark (Ohio) Wire Cloth Co.	John and Leroy streets.	Brass and copper wire cloth.	21	1	
422	The Edward H. Everett Co.	North part city	Fruit jars and bottles.	180	50	
423	Moses & Wehrle	West of city	Stoves and ranges.	55		See No. 423.
424	Excelsior Roller Mills	Church and Front streets.	Flour and feed	4		
425	Loudenslager & Atkins	Front street.	Brass and copper wire cloth.	5		
426	Nutter & Haines	"	Mouldings, etc.	4		
427	Newark Paper Co.	Near B. & O. R. R.	Straw wrapping paper	14	7	
428	T. H. Holman	East Main street.	Carriages, wagons, etc.	15		
429	Dorsey Brothers	Main street.	Flour and feed	8		See No. 428.
430	John H. McNamar	Opposite P. H. depot.	Traction engines, etc.	35		" 429.
431	Bourner & Phillips	Fourth and Canal streets.	Doors, sash, etc.	16		See No. 431.
432	Garber & Vance	Near canal	"	25		432.
433	D. Thomas & Co.	"	Four and feed.	5		
434	R. Scheidler	Second and Canal streets.	Traction engines	25		
435	Newark Steam Laundry	First and Franklin streets.	Laundrying	3	6	
436	Louis Thomas	Fourth and Church streets.	Founders and machinists.	45		
437	Louis Thomas	Near B. & O. R. R.	Flour and feed	8		
438	Ball & Ward Works	Near B. & O. R. R.	Carriages and buggies.	22		See No. 437.
439	Union Iron Works	First and Church streets.	Traction engines	7		
440	Newark Wind Engine Co.	First and Locust streets.	Wind engines	5		
441	Newark Daily American	"	Printing, etc.	13	1	
442	R. & O. R. Shops	North Park Place	Railroad repairs.	50		
443	Advocate Printing Co.	East Newark	Printing and binding	21		
444	Lane Brothers	South Second street.	Structural iron work	25	1	

MADISON COUNTY.

PLAIN CITY.

265	W. I. Ballinger & Sons	Northern part of town.	Flour, etc.	5		See No. 265.
266	Andrew & Koshler	Near depot	Grain elevator	4		
267	E. H. Dry	South Chillicothe street	Carriages and buggies.	6		
268	Barlow, Kent & Co.	North	Furniture	25	7	See No. 268.
269	McCune & Beard	Chillicothe street	Lumber, etc.	7		" 269.
270	Beach & Dorniny	West Bigelow avenue.	Flooring, siding, etc.	4		" 270.
271	K. L. Wood	Near Pan-Handle R. R.	Wrapping paper.	20	3	" 271.

LONDON.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	Minors.	
302	G. W. Shank	Olive street.	Handles	25		7	
303	J. B. Vanwagner	West High street.	Grain elevator	3			See No. 303.
304	F. Placier	"	Flour and feed	5			
305	Wm. M. Jones & Sons	Oak and Fourth streets.	"	12			
306	William Holland	High and Oak streets.	Carriages and buggies	17			
307	E. R. Florence	West High street.	"	7			
308	E. J. Gould	Main street.	Washing machines, etc.	6			See No. 307.
309	London Enterprise	"	Doors, sash, etc.	3	1		" 308.
310	Carson & Gunsaulus	"	Printing etc.	5	1		
311	Heintzelman & Taylor	East High street.	"	4			

MARION COUNTY.

MARION.

223	F. Dale	West of depot.	Staves and headings	8		5	See No. 223.
224	Marion Malleable Iron Co.	Near C., C. & I. R. R.	Malleable iron	50			
225	Bryan & Prendergast	C., C. & I. R. R.	Planing mill work	20			
226	B. J. Camp	"	Turning and scroll sawing	3			See No. 226.
227	Reiber Flouring Mill Co.	"	Flour, meal and feed	3			
228	Marion Steam Shovel Co.	Near depot.	Steam shovels, etc.	80			
229	Gregory & Sears	West street and C., C. & I.	Flour, meal and feed	6			
230	Huber Manufacturing Co.	N. Y., P. & O. R. R.	Traction engines, etc.	175	4		
231	Huber Manufacturing Co.	Center street, near depot.	Boilers	32		2	See No. 231.
232	Marion Manufacturing Co.	Near C., C. & I. R. R.	Thrashers, bullers, etc.	40	1		" 232.
233	Linsley & Lawrence	Main and Center street	Flooring, siding, etc.	6			" 233.
234	Marion Independent	47 North Main street.	Printing	5			
235	Marion Steam Laundry		Laundrying	1	3		

MEIGS COUNTY.

MIDDLEPORT.

661	The German Furniture Co.	Third street.	Furniture	75		7	
662	Ohio Machine Co.	Second and Race streets	Machine work.	22			

663	Standard Nail and Iron Co.....	Foot of Sixth street.....	Iron, steel, etc.....	400	100	See No. 663.
664	Middleport Flour Co.....	Front street.....	Flour, etc.....	12		
665	Garrett, McManis & Co.....	Beach street.....	Building brick, etc.....	22		See No. 665.
666	S. D. Webb.....	Second street.....	Flooring, etc.....	3		

POMEROY.

667	Excelsior Salt Works.....	East Front street.....	Salt.....	50		
668	Rolling Mill Brewing Co.....	Second street.....	Beer.....	12		
669	Buckeye Salt Co.....	East Front street.....	Salt.....	40		
670	Coal Ridge Salt Co.....	East End, near river.....	".....	60		
671	Geyer & Newton.....	Front street.....	Flour, etc.....	10		
672	Sugar Run Mill.....	Mulberry street.....	".....	5		
673	Parr & Genheimer.....	Mechanic street.....	Flooring, etc.....	4		See No. 673.
674	John S. Davis & Son.....	Mulberry street.....	Doors, sash, etc.....	10		674.
675	The Telegraph.....	Second street.....	Printing.....	6		
676	J. C. Probst & Son.....	North Mulberry street.....	Furniture.....	30	2	
677	McKnight & Fisher.....	Front street.....	Wagons and buggies.....	5		See No. 676.
678	Pomeroy Machine Co.....	".....	Engines, etc.....	10		

MORGAN COUNTY.

M'CONNELLSVILLE.

532	George P. Hann.....	Center street.....	Cigars.....	16		
533	McConnelsville Sash and Door Co.....	Near river.....	Doors, sash, etc.....	9		See No. 533.
534	McConnelsville Roller Mills.....	Near Center street.....	Flour, etc.....	6		" 534.
535	Morgan County Democrat.....	Main and Center streets.....	Printing.....	5		
536	McConnelsville Herald.....	Center street.....	Printing, etc.....	6	1	
537	George Bain.....	Lock street.....	Wagons and buggies.....	7		
538	E. M. Stanberry & Co.....	Bank of river.....	Flour, etc.....	3		See No. 538.

MALTA.

539	A. M. Dunsmoor.....	Main street.....	Furniture.....	5		See No. 539.
540	Brown-Manly Plow Co.....	".....	Malta Plows.....	130		
541	McGrath & Humphrey.....	Near Main street.....	Doors, sash, etc.....	8		See No. 541.
542	G. L. Hoffman & Son.....	Main street.....	Harness leather.....	10		

MORROW COUNTY.

CARDINGTON.

272	Cardington Independent.....	Main street.....	Printing.....	4		
273	C. Koppe.....	Near Main street and railroad.....	Whisky.....	2		
274	Gray Brothers & Co.....	Main street.....	Machine repairing.....	10		

CARDINGTON—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	Minors.	
275	Dawson & Wherry	Main street, near depot.	Flour and feed.	6			
276	R. T. Mills	Near Olentangy River.	Feed mills, etc.	2			
277	N. W. Hartman	Walnut street.	Wheat scourers.	10			
278	Hercules Manufacturing Co.	Near depot.	Furniture.	6			See No. 278.
279	J. S. Peck	"	"	11	1		

MT. GILEAD.

280	Mt. Gilead Building Co.	Near depot.	Doors, sash, etc.	7			See No. 280.
281	Anchor Milling Co.	Half-mile east of town.	Flour and feed.	4			" 281.
282	McGowan & Co.	Mile south of town.	Drain tile.	4			
283	Morrow County Sentinel	Main street.	Printing, etc.	3			
284	H. Dunn	Near depot.	Carrriages and buggies.	6			
285	Mt. Gilead Machine Shop	Rich street.	Repairing.	3			
286	Buckeye Roller Mills	South Main street.	Flour and feed.	4			
287	Mt. Gilead Pottery	"	Jugs, jars, etc.	4			
288	Denison Brothers	Mile west of town.	Drain tile.	6			

MUSKINGUM COUNTY.

ZANESVILLE.

457	Excelsior Planing Mill	Lee street.	Doors, sash, etc.	30			See No. 457.
458	Kearns & Co.	Columbia street.	Flint, glass, etc.	08		30	" 458.
459	J. McCarty	North Fifth street.	Chop feed.	2			
460	Great Western Sealing Wax Works.	McIntire avenue and River street.	Sealing wax.	2	2		
461	Levi Miller	"	Castings.	8			
462	Drone & Co.	River street.	Flour, etc.	10			
463	Hook Brothers & Aston	West Main street.	Soap.	9			
464	L. D. Dillon Soap Manufacturing Co.	Near West Main street.	Doors, sash, etc.	6	2		See No. 464.
465	Patterson, Burgess & Co.	Muskingum avenue.	Glazed stoneware, etc.	25		5	" 465.
466	Zanesville Stoneware Co.	Woodlawn avenue.	Stoves, etc.	22			
467	The Hutton Stove Co.	Moxahala avenue.	Flour, etc.	35			
468	Pearl Roller Mill	Canal, near Third street.	Flour, etc.	6			
469	Muskingum Coffin Co.	Madu street.	Coffins and caskets.	36	7		See No. 469.

470	Edward Johnson.....	Near Main street and canal.....	Pearl barley, etc.....	6	50	See No. 475.
471	Kearns-Goruch Glass Co.....	West Main street.....	Window glass, etc.....	250	102	See No. 477.
472	Sturtevant & Martin.....	54 West Main street.....	Hosiery.....	8	10	
473	Gary Brothers & Silvey.....	On canal.....	Furniture.....	35		
474	Central Oil Co.....	Near depot.....	Oil, etc.....	5		
475	J. Smith & Son.....	Locust and Sugar alley.....	Spokes, handles, etc.....	12		
476	Muskingum Steam Laundry.....	44 South Third street.....	Laundrying.....	4	10	
477	Zanesville Electric Light Co.....	Near South Fifth street.....	Electric light.....	7		
478	Griffith and Wedge Co.....	93 ".....	Engines, saw mills, etc.....	100		
479	Jones & Abbott.....	South Third street.....	Stoves, etc.....	50		
480	Peter Keck.....	South Fifth street.....	Carriages and buggies.....	7		
481	Schultz & Co.....	Seventh street and canal.....	Soup.....	50	25	
482	Mader Brothers.....	South street.....	Carriages and buggies.....	12		
483	Hoover & Allison.....	Sixth and Marietta streets.....	Ropes, twines, etc.....	45	30	
484	C. J. Brenholtz.....	16 South Seventh street.....	Paper boxes.....	2	6	
485	Zanesville Woollen Manufacturing Co.....	South end Third street bridge.....	Blankets, flannels, etc.....	30	85	
486	S. A. Waller.....	Near C. & M. V. R.....	Decorated flower pots, etc.....	8		
487	W. B. Harris & Brothers.....	East of city.....	Pressed brick, etc.....	125	20	See No. 487.
488	Greul & Bischoff.....	46 River street.....	Oak harness leather.....	10		
489	A. Merkle.....	River.....	Beer.....	7		
490	American Encaustic Tiling Co.....	East Marietta street.....	Decorative tile, etc.....	140	32	
491	T. B. Townsend & Co.....	Water Works Hill.....	Pressed brick, etc.....	110	8	
492	P. C. Seubach.....	266 East Main street.....	Carriages and buggies.....	8		
493	A. Worstell.....	180 Main street.....	Cigars.....	9	11	
494	Andrew Kimble.....	Hamlin and State streets.....	Bent wood-work.....	12	5	
495	B. Z. & C. R. R. Shops.....	State street.....	Railroad repairs.....	25		
496	Ohio Iron Co.....	East of depot.....	Pig-iron, etc.....	400		
497	Novelty Paper Mill.....	On B. & O. R. R.....	Agricultural implements.....	230		
498	Brown Manufacturing Co.....	Underwood and Zane streets.....	Manilla and newspaper.....	20		See No. 498.
499	J. A. Brenner & Co.....	Monroe street.....	Beer.....	7		
500	F. J. L. Bandy.....	Underwood and Elm streets.....	Engines, etc.....	50		
501	Petit & Straut.....	Orchard and Underwood streets.....	Bread cakes, etc.....	15	3	See No. 501.
502	Shennick, Woodside & Gibbons Mfg Co.....	Fountain avenue.....	Stoves.....	63		
503	McElroy Brothers.....	Fifth and Market streets.....	Cigars.....	7	2	
504	Zimmler & Linser.....	East Main street.....	Beer.....	9		
505	Samuel W. Clark.....	Underwood and Zane streets.....	Doors, sash, etc.....	16		See No. 505.
506	Kernan & Co.....	North Fifth street.....	Mineral water.....	4		
507	John W. Pinkerton & Co.....	12-14 Fourth ".....	Cigars, tobacco, etc.....	10	25	See No. 507.
508	Herdman, Harris & Co.....	Fourth street.....	Doors, sash, etc.....	35		
509	The Duval Engine Co.....	Third and Market streets.....	Engines, boilers, etc.....	28		
510	Zanesville Steam Laundry.....	59 Main street.....	Laundrying.....	2	7	
511	R. A. Worstell.....	Near Fourth street.....	Cigars.....	5	5	
512	Zanesville Daily Signal.....	Fourth street.....	Printing.....	12	2	
513	C. Stalzenbach & Son.....	185 Main street.....	Bread, crackers, etc.....	47	22	
514	Zane Tobacco Co.....	21-23 Main street.....	Pipe tobacco.....	95	24	
515	Zanesville Daily Courier.....	21 North Fifth street.....	Printing, etc.....	16	7	
516	Muskingum Printing Co.....	22 ".....		8	1	
517	Hoffman Brothers & Co.....	Market street.....	Wagons and buggies.....	8		
518	August Wylus.....	Third ".....	Upolstering.....	4	1	
519	Daily Times Record.....	21 North Fifth street.....	Printing.....	18		
520	E. E. Sullivan.....	North ".....	" and binding.....	12	4	

ROSEVILLE.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	Minors.	
521	Dollison & Parrott.....	Near Main street.....	Wagons and buggies.....	6			
522	J. B. Owens.....	Near railroad.....	Decorated flower pots.....	55	5	8	
523	J. L. Weaver.....	Near Main street.....	Refrigerators.....	3			
524	Lyman Lowry.....	".....	Saw pans.....	5			
525	Pace Brothers.....	".....	Jugs and jars.....	3			
526	Kildow Dugan & Co.....	Near railroad.....	Glazed stoneware, etc.....	12	4	1	
527	W. B. Lowry.....	".....	Saw pans, etc.....	8			
528	John Burton.....	".....	Stoneware.....	3			
529	Henry Combs.....	Near Main street.....	Flour and lumber.....	2			
530	J. E. Walker.....	".....	Stoneware.....	4			
531	Sowers & Pace.....	".....	Fruit jars, etc.....	3			See No. 529.

NEW CONCORD.

545	Robert Speer.....	Main street.....	Flour and lumber.....	3			
546	H. O. Wolfe.....	College street.....	Flour and feed.....	3	2	1	
547	Given & Co.....	Main street.....	Cigars.....	3			

NOBLE COUNTY.

CALDWELL.

691	Stephen, Mills & Co.....	Near R. R. Junction.....	Doors, sash, etc.....	12			See No. 691.
692	Caldwell Woolen Mills.....	Cumberland street.....	Blankets, etc.....	24	11		
693	T. H. Morris.....	East street.....	Flooring, etc.....	3			
694	P. H. Berry.....	Near railroad.....	Flour, etc.....	4			
695	L. H. Berry & Co.....	".....	Hosiery.....	2	15	5	
696	Noble County Republican.....	Main street.....	Printing.....	3	1	1	
697	Caldwell Democrat.....	West street.....	".....	3			
698	"The Press.....	Public Square.....	".....	6			
699	Henry Schafer.....	West street.....	Tailoring.....	2	4		

PERRY COUNTY.

NEW LEXINGTON.

578	Oliver K. Granger.....	Near O. C. R. R.....	Flour, etc.....	3	See No. 578.
579	Starr Manufacturing Co.....	" depot.....	Powers' feed grinders.....	18	
580	S. A. Arnold.....	" C. & M. V. R. R.....	Flour and feed.....	3	
581	Selden McGirr.....	" ".....	Doors, sash, etc.....	5	
582	D. C. Fowler.....	South Main street.....	Lumber.....	3	
583	Perry Creamery Co.....	" ".....	Butter.....	8	

PICKAWAY COUNTY.

CIRCLEVILLE.

403	George H. Spangler.....	West Main street.....	Carriages and buggies.....	4	See No. 404.
404	C. B. Tyler.....	East ".....	Doors, sash, etc.....	20	See " 405.
405	Delaplaine & Parks.....	Main and Canal streets.....	Grain elevator.....	2	
406	Roth Brothers.....	West Main street.....	Oak harness leather.....	15	
407	McEwing & Oliver.....	" ".....	Engines and repairs.....	10	
408	Bell & Caldwell.....	Main and Canal streets.....	Wagon and feed lot.....	5	
409	Leach Young.....	Clinton and Mill streets.....	Flour and feed.....	3	
410	H. A. Jackson.....	(anal street.....	Grain elevator.....	8	
411	Hefner & Co.....	West Main street.....	Sugar corn meal.....	10	See No. 411.
412	Circleville Union Herald.....	Elm and (orwin streets.....	Printing.....	7	
413	Pickaway Machine Works.....	anal street.....	Machine work.....	3	
414	William Hefner & Son.....	520 (ourt street.....	Flour and feed.....	7	
415	J. P. Strahm.....	anal street, near (ourt.....	Cigars.....	6	
416	Pemcoart and Watchman.....	Main street.....	Printing.....	7	
417	Portage Straw Board Co.....	(anal street.....	Straw boards.....	210	
418	Conrad Richards.....	" ".....	Barrels.....	10	
419	Edison Electric Light Co.....	Between Main and Franklin streets.....	Electric light.....	4	See No. 419.

PIKE COUNTY.

WAVERLY.

827	James Ennitt.....	Near canal.....	Doors, sash, etc.....	6	See No. 827.
828	Genres Brothers.....	Water street.....	" ".....	5	See " 828.
829	James Ennitt.....	Near canal.....	Flour and highwines.....	15	
830	James Ennitt.....	" ".....	Lumber.....	7	
831	Free Pie Milling Co.....	Near O. S. R. R.....	Flour and feed.....	1	
832	Pike County Republican.....	Main street.....	Printing, etc.....	8	
833	N. D. Scholler & Co.....	North street.....	Oak harness leather.....	3	
834	Waverly Spoke Works.....	Near canal.....	Wagon spokes.....	12	See No. 834.

ROSS COUNTY.

CHILLICOTHE.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	Minors.	
373	Otto Wislem & Co.	West end Main street.	Beer	6			
374	Jacob Knecht	Water street.	Mineral water	9			
375	A. Miller	Fifth and Walnut streets.	Flour, etc.	4			
376	Marfield & Co.	Frankfort Pike.	Doors, sash, etc.	30			See No. 376.
377	Geo. J. Herrnsteln & Bros.	276 Park street.	Ladies and misses' shoes.	24			
378	Union Shoe Co.	236 West Water street.	Laundrying	57	46	5	
379	Duncan Steam Laundry	100-102 West Walnut street.	Wagons, etc.	5	7		
380	August Schneider.	High and Church streets.	Flour and feed.	5			See No. 380.
381	William Miller.	283-285 South Paint street.	Book and newspaper.	6			
382	Ingham & Co.	South Paint street.	Oak harness leather	68	7		See No. 382.
383	Armstrong & Story	South Eleventh street.	Spokes and rough gearing	16			
384	Valley Manufacturing Co.	Junction S. V. and D. & I. R. R.	Electric light.	22			
385	Junemann Electric Light Co.	131 North Paint street.	Oak harness leather.	4			
386	Elsass & Wilson.	East Riverside street.	Meal and feed.	14			
387	Chas. Olmstead & Son	27-31 North Mulberry street.	Spokes and handles.	3			See No. 388.
388	A. G. Yeo	Fifth and Hickory streets.	Engines, boilers, etc.	8			
389	Smith & Ryan.	Second street.	Printing	30			
390	Chillicothe Leader.	Paint and Second streets	"	7	1		
391	Daily News and Register	78 North Paint street	Grain elevator	21	1		
392	Marfield & Co.	Paint and Water streets	Iron fencing, etc.	6			
393	August Deschler.	Water street.	Cut and sawed stone	3			
394	Thomas J. Guhn.	30 East Water street.	Doors, sash, etc.	8			
395	Wm. H. Reed & Co.	54	Machinery	25			
396	Ewing & Studer.	91 North Mulberry street.	Railroad repairs	5			
397	C. W. & B. E. R. Shops.	Near depot	Ironing boards, etc.	200			
398	J. H. S. Ferguson.	East Riverside street.		5	1		

KINGSTON.

399	C. Bolce & Co.	Near S. V. R. R.	Flour and feed	3			See No. 399.
400	Jesse Brundidge	"	Flooring, etc.	3			" 400.
401	Halderman & Boggs.	"	Grain elevator	3			
402	May, Raub & Co.	Near depot.	Drain tile.	10			

SCIOTO COUNTY

PORTSMOUTH.

835	G. D. Waite.....	Second and Jefferson streets	Furniture.....	27	7	See No. 355.
836	Henry Prescott.....	Front street.....	Wheelbarrows.....	12	2	
837	Cuppitt & Webb.....	".....	Sawed lumber.....	10		
838	Reitz & Co.....	".....	Sawed and cut stone	15		
839	Portsmouth Brewery.....	251 West Second street	Beer.....	8		
840	Burress Steel and Iron Works.....	West end of Third street	Iron and steel.....	180		
841	York Manufacturing Co.....	".....	Road scrapers.....	8		
842	Portsmouth Foundry and Mach. Shops.....	Third and Jefferson streets	Rollers, engines, etc.....	50		
843	John Dice.....	174 West Second street	Carriages and buggies.....	10		
844	Portsmouth Steam Bakery.....	109 West Front street	Bread and crackers.....	3		
845	Portsmouth & Co.....	107	Ladies and children's shoes.....	100	12	
846	Nichols Furniture Co.....	Mill and Gay streets	Furniture.....	65	20	See No. 346.
847	Portsmouth Veneer Mills.....	90-92 Mill street	Veneering.....	10		
848	Drew, Selby and Co.....	Third and Gay streets	Ladies and children's shoes	120	23	
849	Lehman Rhodes & Co.....	Fourth and Chillicothe streets	Blankets, flannels, etc.....	27	4	
850	William H. Kebrer.....	North Chillicothe street	Doors, sash etc.....	13		See No. 350.
851	Excelsior Shoe Co.....	219 Chillicothe street	Seamless hosiery.....	2	9	
852	Portsmouth Fire-Brick Co.....	Second and Chillicothe streets	Children's shoes.....	8	4	
853	Johnson Hub and Spoke Works.....	On S. V. R. R., east end	Fire-brick.....	75	1	See No. 352.
854	Ohio Stove Co.....	1113 Chillicothe street	Wheels and wheel stock	60	12	
855	Portsmouth Wagon Stock Co.....	Eleventh and Washington streets	Stoves and hollow-ware.....	70	4	See No. 354.
856	H. Leet & Co.....	Eleventh and Washington streets	Wheels, spokes, etc.....	45		
857	F. P. Drake & Son.....	Eleventh and Washington streets	Flooring, siding, etc.....	10	4	
858	Portsmouth Leader.....	111 West Third street	Job printing.....	2		See No. 357.
859	Portsmouth Daily Blade and Tribune.....	79 West Second street.....	Printing, etc.....	19	5	
860	Portsmouth Correspondent.....	Second and Court streets.....	".....	3	3	
861	T. M. Patterson.....	Third and Market streets.....	Book-binding, etc.....	2	2	
862	Portsmouth Steam Laundry.....	123 East Front street	Laundrying.....	3	3	
863	C. C. Bode & Son.....	612 Chillicothe street	Cut and sawed stone	4	6	See No. 363.
864	S. V. R. R. Shops.....	Twelfth street	Railroad repairs.....	6		
865	O. & N. W. R. R. Shops.....	East End, on S. V. R. R	".....	85		
867		Eleventh street		25		

SCIOTOVILLE.

368	Scioto Fire-Brick Co.....	Between railroad and river.....	Fire-brick.....	26	5	See No. 368.
369	Scioto Lumber Co.....	Near S. V. R. R. and river	Doors, sash, etc.....	15		" 369.
370	J. P. Kimball.....	".....	Flooring and siding.....	8		
371	Scioto Star Fire-Brick Co.....	".....	Fire-brick.....	56	5	See No. 371.
372	Big Sandy Lumber Co.....	".....	Lumber.....	13		

UNION COUNTY.

MARYSVILLE.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Second District.
				Males.	Females.	Minors.	
253	Robinson, Curry & Co.	Near depot.	Doors, sash, etc.	15	2		See No. 253.
254	Isaac Hall.	Fourth and Walnut streets.	Furniture.	40			" 254.
255	C. F. Lentz.	Near depot.	Butter tubs, etc.	25		3	" 255.
256	S. A. Cherry.	Near C. C. & I. R. R.	Lumber.	5			
257	Fleck & Chapman.	Eighth and Main streets.	Doors, sash, etc.	10			See No. 257.
258	A. S. Turner.	R. R. street.	Carriages and buggies.	7			
259	Sprague & Perfect.	North Main street.	Flour, etc.	5			
260	J. Z. Rodgers.	"	Machine repair shop.	1			

MILFORD CENTER.

261	C. Michaels.	Near C. St. L. & P. R. R.	Drain tile.	5			See No. 261.
262	A. J. Rigdon.	Near railroad.	Lumber.	4			
263	Elliott & Moore.	Near Bee Line R. R.	Flour, etc.	3			
264	C. Erb & Bro.	"	Carriages and buggies.	6			

WASHINGTON COUNTY.

HARMAR.

679	Harmar Foundry and Machine Co.	Market street.	Machinery.	7			
680	Strecker, Tompkins & Co.	Third and Franklin streets.	Flour, etc.	7			
681	George Strecker & Co.	Muskingum street.	Rollers, etc.	8			
682	W. F. Robertson & Co.	Second and Putnam streets.	Plows, etc.	37			

MARIETTA.

683	Marietta Register.	Front street.	Printing, etc.	14	1		
684	Jacob Brand & Co.	Near river.	Oak harness leather.	6			
685	A. T. Nye & Son.	Front street.	Stoves, etc.	40	1		
686	Phoenix Milling Co.	Near R. R. and river.	Flour and feed.	16		1	
687	Marietta Chair Co.	Sixth and Putnam streets.	Chairs.	325	120	20	
688	Smith & Foreman.	Third street.	Doors, sash, etc.	6			See No. 688.
689	Marietta Chair Co.	North Front street.	Chair material.	80		6	
690	Strauss, Elston & Co.	"	Flour, etc.	6			

Detailed Statement

OF CHANGES ORDERED IN SECOND DISTRICT.

- No. 1.—Edison Electric Light Co. Place guards along side of belts and pulleys of each engine, and cover all belts where it is necessary to pass over them for the purpose of oiling machinery. Complied.
- No. 4.—Pan Handle R. R. Shops. Provide guards for rip-saws.
- No. 9.—Columbus Knitting Co. Post minors' notice. Complied.
- No. 19.—Smith & Aman. Provide protection between large grindstone and main belt, and provide grindstone belts with shifters.
- No. 48.—Orr, Hanna & Abbott. Guard small grinders in east part of room, on second floor, by covering cog gearing and set-screw of the north one; provide belt that runs large machine on third floor with shifter.
- No. 56.—C. Emrich. Provide railing along west side of fly-wheel and belt of engine, from partition wall to fly-wheel shaft; repair steps that leads from pattern-shop to molding-room, and place hand-railing thereon.
- No. 60.—Peter Schlapp.—Provide saw-guard for rip-saw.
- No. 67.—The J. W. Dann Manufacturing Co. Keep passage-ways to fire-escape and stairway clear of obstructions.
- No. 115.—Hershiser & Snyder. Place fence along side of fly-wheel of engine, between wheel and bed-plate; provide guard for rip-saw.
- No. 118.—Slade & Kelton. Provide guards for buzz-saws.
- No. 119.—Cummings & Ogier. Post minors' notices. Complied.
- No. 120.—Kelton & Brown. Provide guards for rip-saws.
- No. 123.—Watkins & Co. Place casing or railing along fly-wheel of engine.
- No. 124.—Dunden & Bergin. Provide guards for rip-saws.
- No. 129.—Wassell Fire Clay Co. Place railing or casing around rear of fly-wheel of engine at head of short stairway that leads to engine room.
- No. 135.—Excelsior Seat Co. Provide guards for rip-saws.
- No. 141.—Door, Sash and Lumber Co. Provide guards for rip-saws and shapers.
- No. 148.—Jeffrey Manufacturing Co. Post minors' notices. Complied. Provide pans for emery-wheels.
- No. 150.—Central Press Association. Provide outside iron fire-escape. Complied.
- No. 152.—D. & R. Brown. Place boxing around belt that runs through first floor.
- No. 169.—The Gazette Printing Co. Post minors' notices. Complied.
- No. 205.—R. O. Smith & Co. Provide guard for rip-saw.
- No. 209.—Snider, Renner & Dill. Post minors' notices. Complied.
- No. 213.—H. A. McCune. Provide guard for rip-saw.
- No. 214.—Columbus Electric Light and Power Co. Place railing along all exposed belts and pulleys.
- No. 216.—Newark Machine Co. Place railing on open outside stairway leading from the second story of the west building.
- No. 218.—Columbus Steam Carpet Beating and Renovating Co. Place railing around fly-wheel of engine.
- No. 222.—Baker's Art Gallery. Erect iron fire-escape outside, in rear of photograph gallery, or provide iron stairway from window on south side of operating room to window in rear of stage of Opera House.

- No. 223.—T. Dale. Post minors' notices. Complied.
- No. 226.—B. J. Camp. Former changes ordered, in reference to machinery, complied with.
- No. 231.—Huber Manufacturing Co. Post minors' notices. Complied.
- No. 232.—The Marion Manufacturing Co. Provide guard for rip-saw; place railing on open stairs in east end of new shop.
- No. 233.—Linsley & Lawrence. Provide guard for rip-saw.
- No. 236.—Clark & Young. Former changes in reference to machinery complied with.
- No. 247.—E. Snyder. Former changes ordered, in reference to machinery, complied with.
- No. 249.—George A. Aigin. Former changes ordered, in reference to machinery, complied with.
- No. 253.—Robinson, Curry & Co. Cover exposed belts running through floor; provide guard for rip-saw.
- No. 254.—Isaac Half. Provide guard for rip-saw; place protection around fly-wheel of engine.
- No. 255.—C. F. Lentz. Post minors' notices. Complied.
- No. 257.—Fleck & Chapman. Former changes ordered, in reference to machinery, complied with.
- No. 261.—C. Michaels. Former changes ordered, in reference to machinery, complied with.
- No. 265.—W. I. Ballinger & Sons. Former changes ordered, in reference to machinery, complied with.
- No. 268.—Barlow, Kent & Co. Provide guard for rip-saw. Former changes ordered, in reference to machinery and elevator, have been complied with.
- No. 269.—McCune & Beard. Provide guard for rip-saw; also protection to prevent swing-saw from swinging too far in case weight should break.
- No. 270.—Beach & Dominy. Provide guard for rip-saw.
- No. 271.—K. L. Wood. Place protection around fly-wheel and belts of engine in beating room.
- No. 278.—Hercules Manufacturing Co. Former changes of last year complied with.
- No. 280.—Mt. Gilead Building Co. Provide guard for rip-saw.
- No. 281.—Anchor Milling Co. Place guard around fly-wheel of engine; box main belt where it runs through the floor.
- No. 292.—Centerburg Manufacturing Co. Former changes of last year, in reference to machinery, complied with.
- No. 295.—Joseph Porter. Provide guard for rip-saw and shift-belts with shifters.
- No. 303.—J. B. Vanwagner. Former changes, in reference to machinery, complied with.
- No. 307.—E. R. Florence. Provide guard for rip-saw; place guard around fly-wheel and main belt in engine room.
- No. 308.—E. J. Gould. Provide guard for rip-saw.
- No. 314.—Ludlow Soap Manufacturing Co. Guard opening of elevator; place railing or casing around fly-wheel of engine.
- No. 315.—Martin Grove. Provide guards for rip-saws.
- No. 327.—James Emmitt. Cover counter-shafting, between pulleys, that drives buzz-saw, etc.; also provide guard for rip-saw.
- No. 328.—Gehres Brothers. Provide guard for rip-saw.
- No. 334.—Waverly Spoke Works. Former changes ordered, in reference to machinery, complied with.
- No. 335.—G. D. Waite. Provide guards for rip-saws. Complied.

- No. 346.—Nichols Furniture Co. Former changes ordered, in reference to machinery and building, complied with.
- No. 350.—Lehman Rhodes & Co. Provide guard for rip-saw. Former changes ordered, in reference to machinery, complied with.
- No. 352.—Excelsior Shoe Co. Post minors' notices. Complied with.
- No. 354.—Johnson Hub and Spoke Works. Former changes, in reference to guarding open stairway with banisters, complied with.
- No. 357.—H. Leet & Co. Former changes, in reference to machinery, complied with.
- No. 363.—T. M. Patterson. Post minors' notices. Complied with.
- No. 368.—Scioto Fire-Brick Co. Place casing or railing around fly-wheel of engine, and also protection around cog-gearing of pump in engine room. Complied.
- No. 371.—Scioto Star Fire-Brick Co. Former changes, in reference to machinery, complied with.
- No. 376.—Marfield & Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 380.—August Schneider. Former changes ordered, in reference to elevator, have been complied with.
- No. 382.—Ingham & Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 388.—A. G. Yeo. Former changes ordered, in reference to machinery, have been complied with.
- No. 399.—C. Boice & Co. Changes ordered, in reference to machinery, have been complied with.
- No. 400.—Jesse Brundidge. Former changes ordered, in reference to machinery, have been complied with.
- No. 404.—C. B. Tyler. Provide guard for rip-saw.
- No. 405.—Delaplane & Parks. Former changes ordered, in reference to machinery, have been complied with.
- No. 411.—Heffner & Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 419.—Edison Electric Light Co. Place guard railing along large belts and fly-wheels of engines; cover lower belts where employes pass between them.
- No. 420.—Charles Kibler, Jr., & Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 423.—Moses & Wehrle. Provide dust-pans for emery-wheels; guards at elevator openings in east building.
- No. 428.—T. H. Holman. Former changes ordered, in reference to elevator and building, have been complied with.
- No. 429.—Dorsey Brothers. Place boxing around upright shaft in second story, at least four feet high, to prevent employes from being caught by same.
- No. 431.—Bourner & Phillips. Provide guard for rip-saw.
- No. 432.—Garber & Vance. Provide guard for rip-saw.
- No. 437.—Loudenslager & Sites. Former changes ordered, in reference to machinery, have been complied with.
- No. 457.—Excelsior Planing Mill. Provide saw-guards for rip-saw.
- No. 458.—G. W. Kearns & Co. Post minors' notices. Complied.
- No. 464.—L. D. Dillon Soap Manufacturing Co. Former orders, in reference to machinery, have been complied with.
- No. 465.—Patterson, Burgess & Co. Provide saw-guard for rip-saw.
- No. 469.—Muskingum Coffin Co. Former orders, in reference to machinery, have been complied with.

- No. 475.—J. Smith & Son. Former orders, in reference to machinery, have been complied with.
- No. 477.—Zanesville Electric Light Co. Former orders, in reference to machinery, have been complied with.
- No. 487.—W. B. Harris & Brothers. Place railing or casing around fly-wheel of engine. Post minors' notices. Complied.
- No. 498.—Novelty Paper Mill. Former changes ordered, in reference to machinery, have been complied with.
- No. 501.—Petit & Strait. Former changes ordered, in reference to machinery, have been complied with.
- No. 505.—Samuel W. Clark. Former changes ordered, in reference to machinery, have been complied with. Provide saw-guard for rip-saw.
- No. 507.—John W. Pinkerton & Co. Place guard around fly-wheel of engine.
- No. 529.—Henry Combs. Former changes, in reference to machinery, have been complied with.
- No. 533.—McConnelsville Sash and Door Co. Provide guards for rip-saw and shaper; dust-fan for purpose of carrying away dust from large planer.
- No. 534.—McConnelsville Roller Mills. Former changes, in reference to machinery, have been complied with.
- No. 538.—E. M. Stanberry & Co. Former changes, in reference to elevator and building, have been complied with.
- No. 539.—A. M. Dunsmoor. Former changes ordered, in reference to machinery, complied with.
- No. 541.—McGrath & Humphrey. Provide guard for rip-saw.
- No. 543.—Keller & Alt. Provide guard for rip-saw.
- No. 544.—Baltimore Bent Works. Provide all belts necessary to shift with shifters; box all exposed belts running through floor; put guard on band-saw above table, and place casing in front of lower pulley of same.
- No. 548.—T. M. McFarland & Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 550.—Cambridge Roofing Co. Former changes ordered, in reference to machinery and elevator, have been complied with.
- No. 558.—G. W. Coulter. Provide rip-saw with saw-guard. Former changes ordered, in reference to machinery, have been complied with.
- No. 561.—James McAnespie & Co. Post minors' notices. Complied.
- No. 578.—Oliver K. Granger. Box upright shafting on first and second floors.
- No. 588.—George Fallcon. Guard elevator openings; place casing in front of lower pulley of band-saw; railing or casing in front of fly-wheel of engine; provide guard for rip-saw.
- No. 589.—Crippen Brothers. Box in belt running through floor driving small planer; place protection around rear part of fly-wheel of engine.
- No. 594.—Frank Kessler. Provide guard for rip-saw.
- No. 600.—The Logan Manufacturing Co. Post minors' notices. Complied.
- No. 604.—A. Schwenke. Place railing along fly-wheel and main driving belt.
- No. 616.—Jackson Mill and Lumber Co. Provide guard for rip-saw; place casing in front of lower pulley of band-saw.
- No. 617.—Buckeye Mill and Lumber Co. Provide guard for rip-saw; place casing in front of lower pulley of band-saw.
- No. 618.—Franklin Mill Co. Post minors' notices. Complied.
- No. 619.—Hahn, Kruskamp & Murphy. Place railing around fly-wheel of engine.

- No. 620.—A. B. Leach. Box all exposed belts where running through floor, and provide belts necessary to shift with shifters; also guard for rip-saw.
- No. 628.—Witman Stove Co. Former orders, in reference to machinery, have been complied with.
- No. 636. Newman & Spanner. Place railing around fly-wheel in east mill.
- No. 645. R. S. Dupuy. Former changes ordered, in reference to machinery and elevator, have been complied with.
- No. 647.—The Goldcamp Milling Co. Place casing or railing around fly-wheel of engine.
- No. 648.—Mullineaux Brothers. Provide guard for rip-saw.
- No. 649.—Bush, Son & Miller. Place casing around or in front of exposed wooden pulley on counter-shaft running the large grinder on lower floor.
- No. 650.—Morrison & Humphrey. Place protection along the main belt running large saw between belt and truck-way.
- No. 653.—Enos Hill & Co. Former orders, in reference to building and machinery, have been complied with.
- No. 658.—Gatewood Lumber Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 663.—Standard Nail and Iron Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 666.—S. D. Webb. Provide guard for rip-saw.
- No. 673.—Pfarr & Genheimer. Provide guard for rip-saw. Former changes ordered, in reference to building, complied with.
- No. 674.—John S. Davis & Son. Former changes ordered, in reference to protection for hatchway, have been complied with. Provide guard for rip-saw.
- No. 676.—J. C. Probst & Son. Former changes ordered, in reference to machinery and building, have been complied with.
- No. 688.—Smith & Foreman. Provide guard for rip-saw.
- No. 691.—Stephen Mills & Co. Provide guard for rip-saw.
- No. 700.—W. F. Mann. Place protection around belt at passage-way leading into boiler room.
- No. 701.—Columbus Portland Cement Co. Place protection along main belt and fly-wheel of engine.
- No. 702.—Jerry P. Bliss. Post minors' notices; put boxing around large belt running through first floor.

AUGLAIZE COUNTY.

ST. MARY'S.

1003	St. Mary's Tow Co.	Near canal	Tow, husk, etc	4
1004	St. Mary's Foundry and Machine Works	" L. E. & W. R. R.	Engines, etc.	14
1005	L. Himel & Son.	South street	Carriages, etc.	83
1006	Niervet & Koop.	Spring street	Flour	6
1007	R. B. Gordon	Near canal	Flour, etc.	6
1008	St. Mary's Wooten Manufacturing Co.	" Spring street	Blankets, etc.	17
1009	The Jay Linseed Oil Co.	" canal	Linseed, oil, etc.	6

WAPAKONETA.

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BUTLER COUNTY.

MIDDLETOWN.

261	Wilson & McCullay Tobacco Co.	54 East Sixth street.....	Tobacco	225	128	See No. 261.
262	Wm. Caldwell.....	East Fifth street.....	Builders' wood-work.....	30	3	" 282.
263	The Wrenn Paper Co.	Fourth and Water streets	Paper.....	21	11	" 283.
264	The Gardner Paper Co.	Water street.....	Paper bags and sacks.....	12	7	
265	Charles W. Sharple.....	East of Hydraulic, near Second street.....	Machine repairs.....	8		
266	R. E. Johnson & Co.	10 Canal street.....	Paper bags.....	11	33	See No. 266.
267	The Card Fabrique Co.	Canal street.....	Playing cards.....	15	10	" 267.
268	LaTourette & Co.	Rear 54 East Sixth street.....	Twine.....	15	30	" 268.
269	LaTourette & Co.	Third and Water streets.....	Twine.....	22	18	
270	Warlow & Thomas Paper Co.	Seventh street and Broadway.....	Paper mill machinery.....	53	1	See No. 270.
271	The Middletown Paper Co.	Water street.....	Paper.....	75	5	" 271.
272	The Gardner Paper Co.	Water street.....	".....	40	4	" 272.
273	W. B. Oglesby Paper Co.	First and Water streets.....	".....	27	25	" 273.
274	The Tytus Paper Co.	Third and Water streets.....	".....	80	5	" 274.
275	The Middletown Pump Co.	C., C. & I. R., near Fourth street.....	Wooden pumps, etc.....	50	2	" 275.
276	The P. J. Sorg Co.	Third.....	Tobacco	333	171	" 276.

CHAMPAIGN COUNTY.

URBANA.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
879	Edwin Bailey.....	Russell street.....	Lumber.....	5			
880	C. A. Miller.....	Ward and Russell streets.....	Machinery.....	5			
881	William M. Black.....	West Court street.....	Steel and iron bridges.....	12			
882	Warren & Gaumer.....	500 West Court street.....	Carriages, etc.....	12			
883	Cowell Lumber Co.....	200-208 West Court street.....	Doors, sash, etc.....	11			
884	Aughinbaugh & Todd.....	West Miami street.....	Carriages, etc.....	8			
885	George E. Bechtolt.....	North Miami street.....	Plows, etc.....	6			
886	J. J. Robinson & Son.....	Russell and Gaylin streets.....	Brooms.....	8			
887	Perry & White.....	645 North Main street.....	".....	74		6	
888	Perry & White.....	Laurel Oak street.....	Flour, etc.....	25			
889	Anderson & Co.....	Gaylin street.....	Window weights, etc.....	5			
890	Anderson & Russell.....	Main street.....	Shoes, etc.....	8			
891	M. H. Crane & Co.....	East Roybold street.....	Blankets, etc.....	24			
892	Henry Fox & Co.....	Main and Water streets.....	Carriages, etc.....	30	15		
893	C. E. Hammond.....	28 North Main street.....	Leather.....	12			
894	C. E. Smith.....	North Main street.....	Cigars.....	7			
895	J. B. Hitt & Co.....	North Main street.....	Printing.....	20	10		
896	Citizen and Gazette.....			18			

CLARKE COUNTY.

SPRINGFIELD.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
818	A. C. Evans.....	Near P. C. & St. L. R. R.....	Agricultural implements.....	90	1	8	See No. 818.
819	William Burns & Co.....	Southern avenue.....	Iron fencing.....	8			
820	Springfield Manufacturing Co.....	65-68 East Washington street.....	Agricultural implements.....	40			See No. 820.
821	MacGregor Brothers & Co.....	York and Mound streets.....	Brass foundries, etc.....	12		8	" 821.
822	Ohio Southern R. R. Shops.....	East end.....	Railroad repairs.....	100			
823	The Whittely Steel Co.....	East end.....	Steel.....	125			
824	The William N. Whittely Co.....	East Springfield.....	Reapers and mowers.....	1,250			
825	Armstrong Brothers.....	74 East Washington street.....	Boilers and engines.....	100			
826	F. F. Miller.....		Gold and silver-plating.....	8			
827	The Allen Compound Steam Valve Co.....		Steam valves.....	3			

826	L. J. Hickey	74 East Washington street.	Machinery	4		
827	The Springfield Brass Co.	80-84 South Limestone street.	Brass goods.	25	2	
828	Whitely Malleable Iron Co.	Linden avenue.	Malleable iron	400		
829	Amos Whitely & Co.	Monroe and Gallagher streets.	Harvesting machinery	700		
830	David Street	389 West Main street.	Doors, sash, etc.	8		See No. 832.
831	C. V. H. Bretnay	116-118 East "	Oak harness leather.	20		
832	Springfield Engine & Thresher Co.'s Boiler Works	Columbia street.	Rollers	30		
833	P. P. Mast & Co.	Warder	Grain drills, etc.	300	10	
834	The Thomas Manufacturing Co.	Limestone and Monroe streets.	Hay rakes, etc.	175		
835	Wilson, Whitely & Co.	Linden avenue.	Cutter bars, etc.	175		
836	Springfield Coffin and Casket Co.	Spring street.	Coffins and caskets.	225	15	
837	Springfield Engine and Thresher Co.	Limestone street.	Engines and threshers	35	1	See No. 838.
838	Springfield Planing Mill and Lumber Co.	335-337 West Columbia street.	Doors, sash, etc.	150	2	" 838-1
839	The Tricycle Manufacturing Co.	Park and Columbia streets.	Bicycles, tricycles, etc.	24		
840	Blakeney Foundry Co.	George street	Iron castings.	100	6	
841	Springfield Malleable Iron Co.	South Mechanic street.	Malleable iron	80		
842	Foss Manufacturing Co.	Warder street.	Feed mills, etc.	157	10	
843	E. W. Ross & Co.	Lagonda avenue.	Feed cutters, etc.	75	3	
844	James Lefell & Co.	East of city.	Steam engines and binders	125	4	See No. 845.
845	Warder, Bushnell & Glessner Co.	Lagonda avenue.	Mowers and binders	80	5	
846	Robbins & Myers	Isabella street.	Iron castings.	1,200	10	
847	Mast, Foss & Co.	Main street and Western avenue	Wind engines, etc.	140		See No. 848.
848	Springfield Machine Tool Co.	North and Center streets.	Machinery.	150		" 849.
849	The Standard Manufacturing Co.	Rockway street.	Extension tables.	20		
850	Mark A. Smith	66-68 West North street.	Soup	50	6	See No. 852.
851	Rodgers Fence Co.	Center and Columbia streets.	Iron fence, etc.	35	2	See " 853.
852	St. John Sewing Machine Co.	Main and Center streets.	Sewing-machine tables.	25	6	
853	Fehl Johnson & Co.	19 West Washington street.	Sewing machines	20		
854	L. Patrick & Co.	Distler street.	Furnaces	05	2	
855	The Springfield Machine Co.	Center and Columbia streets.	Hay forks, etc.	12		See No. 854.
856	Mast, Crowell & Kirkpatrick	120 West High street.	Doors, sash, etc.	20		" 859.
857	August Stokker	71 West Main street.	Printing, etc.	60	8	
858	Buckeye Printing & Publishing Co.	46	Cigars	12		
859	Champion Electric Light Co.	39 West Washington street.	Printing, etc.	17	6	
860	The Wadsworth Engraving Co.	21	Electric light.	10		See No. 863.
861	The Wadsworth Engraving Co.	Main and Mechanic streets.	Plates, stencils, etc.	17		
862	The New Era Co.	51 South Mechanic street.	Metallic burial cases, etc.	10		
863	The New Era Co.	24 West High street.	Printing, etc.	25	11	
864	The Winters Printing & Litho. Co.	High and Walnut streets.	Book-binding	15	3	
865			Job printing, etc.	7		
866				60	15	

CLINTON COUNTY.

WILMINGTON.

1080	Hawkins & Spruy	North Mulberry street.	Lumber	3		See No. 1080.
1081	Shepley & Laddum	"	Doors, sash, etc.	10		
1082	Horace Gallup	Sugar street.	Lumber	8		
1083	The Clinton Manufacturing Co.	South Mulberry street.	Furnaces	15		See No. 1083.

WILMINGTON—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
1084	James Fisher.....	East Main street.....	Builders' wood-work.....	4			
1085	N. Starbuck & Sons.....	Near railroad.....	Lumber.....	4			
1086	William Schofield, Sr.....	North South street.....	Blankets, etc.....	12			
1087	The Fulton Milling Co.....	Near Midland depot.....	Flour, etc.....	11			See No. 1087.
1088	The Irwin Auger Bldg Co.....	Near railroad.....	Auger bits.....	40			
1089	Champion Bridge Co.....	".....	Iron bridges.....	18			

GREENE COUNTY.

XENIA.

1073	N. F. Copenhagen.....	Near L. M. R. R.....	Lumber.....	5			
1074	Xenia Republican.....	Detroit street.....	Printing, etc.....	6			
1075	Xenia Twine and Cordage Co.....	West Cincinnati avenue.....	Cordage, etc.....	100	30		
1076	The Field Cordage Co.....	West Market street.....	".....	115	50	10	See No. 1076.
1077	Xenia Paper Co.....	Near L. M. R. R.....	Brown paper.....	58			
1078	Charles Burdell & Co.....	South Detroit street.....	Doors, sash, etc.....	4			See No. 1078.
1079	E. N. Forsyth.....	Near L. M. R. R.....	Lumber.....	15			See " 1079.

HAMILTON COUNTY.

CINCINNATI.

1	David Brothers.....	201 Freeman street.....	Cigars.....	9				2	See No. 1.
2	Bering & Co.....	West Pearl street.....	Shoes.....	25	25			2	" 2.
3	The Ireland Manufacturing Co.....	80 Harrison street.....	Builders' hardware.....	100	50			3	" 3.
4	Schler & Co.....	Fifth street and Englestein avenue.....	Cardiganes.....	250	8			4	" 4.
5	J. H. Lucke & Co.....	100 East Eighth street.....	Cigars.....	75	100			5	" 5.
6	Cincinnati Planing Mill Co.....	Eighth street and Englestein avenue.....	Builders' wood-work.....	32				6	" 6.
7	The Star Box Co.....	101-113 East Eighth street.....	Packing boxes.....	5				7	" 7.
8	The Geisse Lumber Co.....	4-12 East Court street.....	Builders' lumber.....	12				8	" 8.
9	A. Morrison.....	Queen City avenue.....	Builders' wood-work.....	85				9	" 9.
10	J. R. Mitchell & Co.....	52 Twelfth street.....	Bristles and curled hair.....	100	25			10	" 10.
11	A. & J. Doeschel.....		Candy.....	20	20			11	" 11.

12	The Brockman Pottery Co.	440-458 Richmond street.	Granite decorated ware	75	25	20	See No. 12.
13	Continental Cabinet Co.	Court street and McLean avenue.	Furniture	60		3	" 13.
14	Wrightley Brothers	272 Broadway	Paper boxes	10	40	8	" 14.
15	Hiram W. Davis & Co.	771 and Denman streets	Carriages, etc.	500	12	95	" 15.
16	Haer, Lay & Co.	63-61 Gilbert avenue	Cotton yarn, etc.	17	13	100	" 16.
17	Krohn, Fels & Co.	7-9 East Sixth street	Cigars	125	125	50	" 17.
18	H. Treig & Bro.	15-17 West Sixth street	Moody	125	6	9	" 18.
19	Schustan, May & Co.	Second and Plum streets	Billiard tables, etc.	36			" 19.
20	Brunswick, Balke & Collender Co.	8-12 West Sixth street	Musical instruments	125			" 20.
21	R. Glier	38 Plum street	Job printing	3			
22	The Crescent Printing Co.	38 "	Stamps, etc.	12			
23	Alex. Fee & Co.	Second and Plum streets	Electric motors, etc.	5	2		
24	G. F. Card Manufacturing Co.	Second and Plum streets	Patterns	2			
25	Walker & Havlin	38 Plum street	Light machinery	7			
26	H. H. Thierman	84 Main street	Paper boxes	15	45	15	See No. 28.
27	R. H. LeBlond	Pearl and Main streets	Cigars	20			" 28.
28	R. H. Crane	83 Race street	Job printing	125	75	60	" 30.
29	James E. Winterfeldt	63 Walnut street	Upholstering	9	1	3	" 31.
30	Haus Brothers	120-122 West Second street	Tobacco	15	4	4	" 32.
31	Ditchen, Zinsle & Co.	19 East Second street	Crackers	4	5	2	" 33.
32	Charles Kalper	Second and Ludlow streets	Screws, taps, etc.	9		1	" 34.
33	Henry Bader & Son	Pearl and Plum streets	Belted leather	80		10	" 35.
34	John Baile's Son	Pearl and Plum streets	Electrical appliances, etc.	11		4	" 36.
35	Cincinnati Screw and Tap Co.	124 West Second street	Laundry	35			
36	O'Neal & Price Co.	51 Longworth street	Furniture	1	18	4	See No. 39.
37	C. E. Jones & Bro.	101	Candles, etc.	35		4	" 40.
38	A. W. Brant	737-739 West Front street	Lamps and lamp fixtures	20	8		" 41.
39	Front Street Furniture Co.	176 West Fifth street	Laundry	6			" 42.
40	Doeschler Brothers	101 Longworth street	Caps	9	35		
41	H. Korf, Jr.	Rear 153-153 Broadway	Laundry	3	6		See No. 44.
42	M. Spiekerman	116 Baker street	Cigars	2	45	20	" 45.
43	M. Benjamin	217 West Fifth street	Hosiery	45	70	4	" 46.
44	The American Laundry Co.	141-143 West Pearl street	Screws, taps, etc.	12	3	4	" 47.
45	L. Newburger & Co.	Dalton avenue and Wiltach street	Chair backs	50			" 48.
46	A. Rensch & Co.	144 Laurel street	Paper stock	28		4	" 49.
47	John R. Wheaton	Second and Plum streets	Carriage hardware, etc.	30	25	17	" 50.
48	Cincinnati Screw and Tap Co.	Third and Wood streets	Cigars	3	25	4	" 51.
49	Puttmann & Robers	365-369 West Fifth street	Jewelry	19		4	" 52.
50	Parker Carriage Goods Co.	138 Hunt street	" etc	15	1	8	" 53.
51	L. W. Sutphin	111 Main street	Gold pens, pencils, etc.	125	15	10	" 60.
52	Strediff & Rothkopf	125 Main street	Center tables	39	6	4	" 62.
53	Fritz Brothers	Fourth and Vine streets	Pearl novelties	10		2	" 63.
54	H. Keck & Co.	" Walnut streets	Parlor frames (furniture)	12	2	4	" 64.
55	Dubne & Co.	68-70 West Fourth street	Cigar boxes	20	14	7	" 66.
56	Fox Brothers & Co.	Rear 60 Pendleton street	Carriage twine, etc.	20	23	20	" 67.
57	John Holland Gold Pen Co.	70 Pendleton street	Wire nails, etc.	50	4	20	" 68.
58	Schreiner & Stork	60-70 "	Carriages	11		2	" 69.
59	Harry Pollitz	1-7 Dandridge street	etc	40	1		" 70.
60	George Uchtmann & Brother	Eighth and Harriet streets					
61	Frank Unnewehr & Co.	Fifth and Lock streets					
62	C. Jacobs Carriage Co.	538 Vine street					
63	The Cincinnati Wire Co.	57-61 Elm street					
64	C. Behlen						
65	James & Mayers Buggy Co.						
66							
67							
68							
69							
70							

CINCINNATI—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
71	Geo. H. Bonte & Co.	53 Lock street.	Twine	16	5	10	See No. 71.
72	Lewis & Loper.	53 "	Cordage, ropes, etc.	30	23	10	" 72.
73	Walter L. Haddy & Co.	21-23 "	Machinery and dies	6		1	" 73.
74	Universal Radial Drill Co.	Third and Lock streets		30			
75	H. H. Wiggins.	535-539 Plum street.	Furniture	60		4	See No. 75.
141	Stihel, Lockwood & Co.	Clearwater street	Leather	40			" 141.
142	The Cincinnati Soap Co.	Clarkson street	Toilet and fancy soap.	9		1	
143	Standard Soap Co.	897 Central avenue.	Soap	2			See No. 143.
144	W. C. Kennett.	902-908 "	Leather.	39			" 144.
145	Anderson & Harris Carriage Co.	Freeman avenue.	Carriages, etc.	100	10		" 145.
146	Joseph B. Blettner.	894 Central avenue.	General machinery	14			" 146.
147	Joseph B. Hauser & Son.	872-874 "	Beer tanks, etc.	15			
148	Rudolph Subre	898-870 "	Leather.	15			See No. 148.
149	Excelsior Sugar Mold Co.	783 "	Cigar molds.	6		2	" 149.
150	Hauser, Kneimer & Co.	893-871 "	Beer kegs, etc.	25			
151	Kruger, Burkhardt & Co.	York street and Central avenue.	Steam engines, etc.	65		4	See No. 151.
152	Keyser, Haug & Co.	733 Central avenue.	General wood-work	16			" 152.
153	Sullivan Printing Works.	Broadway and Court street.	Printing	24	10	3	" 153.
154	Louis Massman.	72-74 Pendleton street	Enameling metal	8			
155	Perkins & Campbell.	Court street and Broadway.	Horse collars, cushions, etc.	50	1	6	See No. 155.
156	Richard Wooley's Sons.	Eighth and Main streets.	Harness, collars, etc.	110	1	20	" 156.
157	A. Schelder.	Court street.	Vermorel, macaroni, etc.	8			
217	The Egan Co.	252-280 West Front street	Wood working machinery	299		8	See No. 217.
218	The Flexible Wire Mat Co.	Depot and Eighth streets.	Wire door mats.	8		6	" 218.
219	H. J. Morten & Co.	" South streets.	Carriage wood-work.	60		7	" 219.
220	The American Clay Bird Co.	Eighth street and Glenway avenue	Clay birds	23		16	" 220.
221	S. C. Tatam & Co.	254 Water street.	Machinery, etc.	100		10	" 221.
222	The Favorite Carriage Co.	Eighth street, near Depot street.	Carriages	110	10	3	" 222.
223	The Bloch Printing Co.	Plum and McFarland streets.	Printing, publishing, etc.	65	40	20	" 223.
224	Dorner & Marks.	Third street and Central avenue.	Knit goods	1		3	" 224.
225	John C. Taber.	135 Plum street.	Remodeling straw goods	5	15		
226	Joseph Wachtel.	Central avenue and Third street.	Printing	6		1	See No. 226.
227	Block & Pollak.	21st Ward.	Railroad car axles, etc.	60			" 227.
228	Charles Taylor & Sons.	Burns and Storrs streets.	Fire-brick	40		3	" 228.
229	Rafterman & Luth.	Eighth street, near Evans street.	Carriages	40		4	" 229.
230	Bedway & Burton.	Richmond and Harriet streets.	Stoves	70			
231	Wemyer Iron Works Co.	"	Sugar machinery, etc.	50			
232	The Illinois Leather Co.	855 Spring Grove avenue.	Plastering hair, etc.	30			See No. 232.
233	Louis C. James & Co.	62 Longworth street.	Printers' machinery	6			

* See also No. 408.

John Rowell	.....	62 Longworth street	.....	5	12	See No. 234.
American Press Association	.....	64 " "	.....	45	2	" 235.
Cohen & Co	.....	62-64 Longworth street	.....	30	2	" 236.
Spence Brothers & Co	.....	86-96 Sycamore street	.....	30	12	" 237.
The Cook Carriage Co	.....	Spring Grove avenue	.....	30	11	" 238.
Grosman, Gouville & Co	.....	Produce alley	.....	25	6	" 239.
H. D. Smith & Co	.....	56-58 Main street	.....	25	50	" 240.
Grosman, Gouville & Co	.....	74-76 " "	.....	40	1	" 241.
L. Schreder Sons Co	.....	177-185 Eggleston avenue	.....	26	6	" 242.
George Scott	.....	664-682 West Front street	.....	73	14	" 243.
Sol. Langton Sons Co	.....	28 Freeman avenue	.....	15	10	" 244.
Geo. H. Bonte	.....	23-31 Lock street	.....	25	6	" 245.
Hauss Electric Manufacturing Co	.....	Broadway	.....	30	3	" 246.
Langenbrunner & Co	.....	230 Main street	.....	30	5	" 247.
John P. Hoeb & Co	.....	Hammond street	.....	30	6	" 248.
Jacob Peak & Co	.....	1-5 Water street	.....	10	13	" 249.
Dormer Brothers	.....	18 West Pearl street	.....	4	6	" 250.
F. W. Freeman	.....	106 " "	.....	10	1	See No. 317.
The P. J. Marqua Manufacturing Co	.....	16 " "	.....	4	50	" 318.
J. Rosenthal & Co	.....	Eighth and Evans streets	.....	12	4	" 319.
L. Newburger & Brother	.....	14-16 Genesee street	.....	90	7	" 320.
The Standard Wagon Co	.....	141-143 West Pearl street	.....	35	10	" 321.
The Standard Wheel Co	.....	1000 West Eighth street	.....	40	70	" 322.
The Golden Eagle Buggy Co	.....	South street	.....	288	12	" 323.
H. Miller	.....	225 Elm street	.....	80	12	" 324.
Isaac Winkler & Bro	.....	18-20 Main street	.....	70	4	" 325.
George Deibel & Co	.....	29 " "	.....	20	3	" 326.
Jacob Winkler & Co	.....	36 " "	.....	3	2	See No. 327.
Fred. Davenport	.....	22-24 East Third street	.....	5	18	" 328.
Clemens Toenjes	.....	16-18 Reynolds street	.....	3	15	" 329.
F. Launkenheimer	.....	15-17 West Eighth street	.....	2	20	" 330.
Brunswick, Balke and Collender Co	.....	12-18 East " "	.....	150	20	" 331.
John H. Michael & Co	.....	Eighth and Sycamore streets	.....	5	.....	See No. 333.
The Frey Printing Co	.....	11-13 East Eighth street	.....	25	5	" 334.
Robert Mitchell Furniture Co	.....	John and Second streets	.....	68	18	" 335.
Cincinnati Safe and Lock Co	.....	41-49 Elm street	.....	600	6	" 336.
W. H. Stewart's Sons	.....	363-367 Plum street	.....	150	20	" 337.
John C. Beck & Bro	.....	309 " "	.....	35	.....	" 343.
Joe. Scheidt & Son	.....	311-315 " "	.....	10	7	See No. 345.
T. T. Haydock Carriage Co	.....	Twelfth and Plum streets	.....	4	25	" 346.
Pierce, Atkins & Co	.....	Plum and Charles streets	.....	300	70	" 347.
Philip Helgel	.....	247-249 West Liberty street	.....	8	7	" 348.
M. Drosch	.....	Wade and John streets	.....	16	3	See No. 349.
R. Rorer	.....	Elm and Canal streets	.....	21	8	" 350.
Geo. Henshaw & Sons	.....	441-443 Plum street	.....	160	50	" 351.
Water Elevator and Purifier Co	.....	John and Betts streets	.....	11	7	" 352.
Herman Klein & Son	.....	141-143 Plum street	.....	10	175	See No. 353.
Geo. Vehr & Co	.....	Fourteenth and Plum streets	.....	25	.....	" 354.
Geo. W. Stark & Brothers	.....	Elm and Canal streets	.....	7	.....	" 355.
L. A. Strobel & Co	.....	141-143 Plum street	.....	120	5	" 356.
A. Wiemann & Co	.....	162-164 Poplar street	.....	17	30	" 357.
Ohio Planing Mill and Lumber Co	.....	445-447 Plum street	.....	40	4	" 358.
Duchscher & Mischel	.....	.....	.....	20	.....	" 359.

CINCINNATI—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
360	A. Morrison & Co.....	4-12 East North Court street.....	Sash, doors and blinds.....	75			See No. 360.
361	Samuel W. Treest.....	98-102 North Canal street.....	Cigar boxes.....	55	45	30	" 361.
362	Shannon Furniture Co.....	Baymiller and Poplar streets.....	Chamber suits.....	61			" 362.
363	American Faucet, Bung and Refrigerator Co.....	214-218 West Liberty street.....	Refrigerators, etc.....	80		4	
364	Cincinnati Furniture Co.....	202-210 ".....	Furniture.....	50		6	
365	J. W. Cottrell & Co.....	Ninth street and Broadway.....	Contracting builders.....	40			
366	J. E. Schrader.....	419-423 West Court street.....	Laundrying.....	16			
367	Stille & Duhrmeyer.....	Liberty and Dalton avenue.....	Furniture.....	100		15	
368	Eugene Berninghaus.....	134-138 Western avenue.....	Barbers' supplies.....	70	1	16	
369	H. Rosenbaum & Co.....	250-256 Race street.....	Cloaks, etc.....	40	100	10	See No. 369.
370	Geo. D. Winchell Manufacturing Co.....	Bank and Riddle streets.....	Japanned tinware.....	65	5	15	"
371	Clifford B. Digelins.....	417 Plum street.....	Packing boxes.....	9			
372	The Henderson-Achert Co.....	117-121 West Fifth street.....	Lithographing.....	75	8	25	
373	The N. A. Jeffras Co.....	155-157 ".....	Cloaks.....	10	40		
374	Eureka Laundry.....	14 and 151 ".....	Laundrying.....	3	21		
375	M. H. Marks.....	178-180 Race street.....	Clothing.....	16	3		See No. 375.
376	Commercial Gazette Job Printing Co.....	Fourth and Race streets.....	Job printing.....	15	3	3	
377	W. J. Quarry.....	127-129 South Canal street.....	Show cards and map mounting.....	15			
378	Lloyd Brothers.....	Court and Plum streets.....	Drugs and chemicals.....	18	7	4	
379	B. H. Lampling & Co.....	135-148 South Canal street.....	Soap.....	6			
380	Chas. Seybold.....	127-129 ".....	Machinery.....	9			
381	Liberty Furniture Co.....	62-66 Oliver street.....	Furniture.....	50		4	
382	H. F. Husch & Son.....	41-45 Logan street.....	Sausages and meats.....	8			
383	Geo. Reif & Co.....	35-39 ".....	Sausages.....	25	1		
384	L. Steigert.....	Elder and Logan streets.....	Machinery.....	4			
385	Eclipse Sewing Machine Co.....	Court and Sycamore streets.....	Sewing-machines.....	13			
386	The F. Tucherfarber Co.....	35-37 Plum street.....	Iron and glass show cards.....	42	5	12	
387	Radcliffe & Rowe.....	48-50 Central avenue.....	Saws and knives.....	13			
388	John Kuehnle.....	Second street and Central avenue.....	Machinery.....	38		4	
389	J. M. Robinson & Co.....	18-50 Central avenue.....	".....	6			
390	J. J. Spilker.....	48-50 ".....	".....	10			
391	Smith & Mills.....	270 West Fourth street.....	Pants.....	3	12		
392	Wildberg Brothers.....	197 ".....	Quilted glass.....	10	1		
393	Geo. A. Brown.....	268 ".....	Cloaks.....	14	75		
394	B. Bischof Sons.....	262 ".....	Cloaks, etc.....	15	40		
395	Robinson Cloak & Suit Co.....	176 ".....	Jewelry.....	15	1		
396	Michie Brothers.....	22-24 East Ninth street.....	Laundrying.....	2	25		
397	White Cloud Laundry.....	22-26 ".....	Laundrying and printing.....	40	12	4	
398	Standard Publishing Co.....	".....	Wood ornaments.....	2			
399	Wm. Meyer.....	14 ".....		2			

400	Oscar Warden Calcium Light Co.	14 East Ninth street.	Calcium light	3	85	15	
401	Maloney Brothers.	10-14 "	Ladies' fine shoes	35	80	10	
402	Richer & Co.	10-14 "	Brass foundry	14			
403	Hugh McCullum.	53 West Ninth street.	Plumbers' supplies	25			
404	Blue Ridge Marble Co.	414-428 West Front street.	Georgia marble goods	130			
405	H. C. Osterman.	Smith and Augusta streets.	Chairs, center-tables, etc.	140	1	30	
406	Meador Furniture Co.	Front and Smith streets.	Furniture	80	1	6	
407	The John H. McGowan Co.	Central avenue.	Pumps	4	45		
408	White Star Laundry	Ninth and Sycamore streets.	Laundrying	26			
409	Gooch Freezer Co.	39-38 East Ninth street.	Freezers	220	75		
410	Roth, Bruner & Feist.	11-17 West Eighth street.	Frame moulding	175	1	30	
411	The Reuhl Moulding M'fg. Co.	243-245 Sycamore street.	Harness machinery	9			
412	Randall & Co.	518-520 West Sixth street.	Woven wire goods	3	1	1	
413	Woven Wire Mattress Co.	" "	Metal goods	5			
414	The Clipper Manufacturing Co.	543	Machinery, etc.	40	40	16	
415	Wals & Ross.	10-12 East Seventh street.	Fine shoes	4			
416	The Wm. Cosgrove Manufacturing Co.	10-12 "	Engravers' wood	40	1	5	
417	Buschle & Hagen.	10-14 "	Silver-plated ware	50	6	6	
418	Homann & Co.	10-18 "	Bulldozers' hardware, etc.	25			
419	J. B. Schroder & Co.	16-18 "	Carriages and wagons	3			
420	John H. Michael & Co.	25 East Eighth street.	Carriages and buggies	300	50		
421	W. H. Rowe & Co.	238-244 Sycamore street.	Fine shoes	250	40		
422	Krippendorf, Dittman & Co.	Sycamore and New streets.		150	40		
423	Blackler, Gerstle & Co.	235-239 Sycamore street.		48	82	2	
424	S. Lowenthal & Co.	233 to 239 Sycamore street.		12			
425	The Dams & Pulscomp M'fg. Co.	247-249 Sycamore street.	Parlor furniture frames	35	10		
426	Wm. F. Thorne & Co.	Eighth and Sycamore streets.	Boots and shoes	40			
427	Wm. Miller.	" "	Ranges and furnaces	21			
428	B. Schepman & Co.	247-249 Sycamore street.	Carriages and wagons	40			
429	The Meyer & Merkle Manufacturing Co.	328-328½ Elm street.	Fancy furniture, etc.	18		8	See No. 429.
430	Queen City Spring Co.	Pearl and Vine streets.	Carriage and platform springs	10			
431	Wm. A. Webb & Sons.	103 West Third street.	Blank books, etc.	25	10		
432	Herman, Loebl & Co.	Third and Vine streets.	Cloaks, etc.	15	60		
433	Seasongood, Henderson & Co.	163-171 Race street.	Clothing	20	1	4	
434	Noterman & Jonas.	131 West Third street.	Jewelry	20	8	4	
435	Levy, Price & Co.	111 West Third street.	Boys' clothing	15	4		
436	J. G. Zinsmeister.	20 Genesee street.	Wagons	3			
437	Spencer & Craig.	169-171 Race street.	Printing	25	3	4	See No. 437.
438	Campbell & Co.	59-61 Longworth street.	Electrotypes	20	4		
439	O. Armleder & Co.	139	Carriages and wagons	13	2	1	
440	F. Peters & Co.	217-219 Elm street.	Machinists' edge tools	3			
441	The Pettibone Manufacturing Co.	165	Military goods, etc.	65	25		
442	Buddick Brothers & Co.	Court street and Central avenue.	Dry goods, carpets, etc.	17	19	6	
443	F. J. Rennekamp & Bros.	231-239 Clinton street.	Furniture	90			
444	The P. Eckert Co.	121-127 West Court street.	Confectioneries	75	36	5	See No. 444.
445	August Hentschel	368 Central avenue.	Upholstering, etc.	11	1	4	
446	C. B. Hilbert.	18 Genesee street.	Machinery	9		1	
447	Lottman & Brothers.	393 Central avenue.	Dry goods and notions	4	3		
448	F. W. Luebbing & Co.	134 West Court street.	Copper goods	4			
449	F. C. Deekbach, Sons & Co.	165-167 West Court street.	Copper and brass works	40			See No. 449.
450	Beas Street Furniture Co.	224-228 Betts street.	Furniture	75	20	450	
451	H. T. Kesper.	229-232 "	"	8	2	451	
452	Franklin Furniture Co.	Franklin and Sycamore streets.	"	45	2	452	
453	H. Rikhoof & Co.	11 Franklin street.	Mattresses, etc.	20	2	453	

CINCINNATI—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
454	Kleine & Danmeyer.....	72-74 Twelfth street.....	Carriages and wagons.....	20		2	See No. 454.
455	M. & A. Isaacs.....	353-365 Clark street.....	Hosiery and mitts.....	10	34	15	" 455.
456	A. Sander & Co.....	37-41 Espanola street.....	Slaughtering.....	16			
457	A. Sander & Co.....	15-19 Oehler street.....	Pork and beef packing.....	18			
458	Roth, Meyer & Co.....	337-339 Freeman avenue.....	Sugar-cured meats.....	86		1	
459	Streit & Schmitt.....	354-358 Hopkins street.....	Furniture.....	70		6	
460	Wm. Becker & Co.....	Kenner and Dennman streets.....		88		1	See No. 460.
461	Chas. Duwell & Co.....	18-19 Kenner street.....	Smoking tobaccos.....	7		3	" 461.
462	A. E. Muth.....	87-89 Richmond street.....	Steam bakery.....	24	1		
463	West End Screen Works.....	500 ".....	Window and door screens.....	3			
464	Eugene Zugatter.....	496-498 ".....	Lounges.....	3			
465	Cincinnati Office, Store and Saloon Fix- ture Co.....	498 ".....	Saloon fixtures.....	21	1	2	See No. 465.
466	Thomas Kelsall.....	McLean avenue and Richmond street.....	Office furniture, etc.....	60			
467	The Sportsman Shot Co.....	Court and Harriet streets.....	Shot.....	6			
468	John N. Poage.....	".....	Railway water columns, etc.....	9	1		
469	B. Vercamp & Sons.....	469-473 Walnut street.....	Carriages.....	35			
470	Albrens Manufacturing Co.....	22-24 Webster street.....	Fire engines.....	66			
471	The G. A. Gray Co.....	477-481 Sycamore street.....	Machine tools.....	51		6	See No. 471.
472	N. H. Helsel, Jr.....	11-15 West Liberty street.....	Carriages.....	6		15	
473	The Stearns & Foster Co.....	122-126 West Pearl street.....	Wadding and batting.....	43			
474	Globe Carriage Co.....	Liberty and Walnut streets.....	Carriages.....	50	1	5	
475	Mohawk Knitting Co.....	534 Walnut street.....	Hosiery.....	1	22	2	See No. 475.
476	A. Lotze's Sons & Co.....	219 ".....	Warm air furnaces.....	25	3		
477	Aldine Printing Works.....	248 ".....	Job printing.....	40	18		
478	Teasdale Dye House.....	265 ".....	Dyeing.....	12	9		
479	Robert Kirkup & Co.....	60 Lodge street.....	Brass founders.....	2		2	
480	Thomas Gibson Co.....	373 Walnut street.....	Plumbers' supplies.....	38			
481	The Union Distilling Co.....	392-394 Richmond street.....	Distillers and rectifiers.....	17			
482	E. R. Longhead & Co.....	Richmond and Curt streets.....	Builders' material, etc.....	44		3	See No. 482.
483	Cincinnati Coffin Co.....	Carr and Fillmore streets.....	Coffins and caskets.....	205	60	12	" 483.
484	The Foss-Schneider Bottling Co.....	22-26 Fillmore street.....	Bottled beer.....	16		5	
485	The Foss-Schneider Brewing Co.....	279-287 Freeman avenue.....	Malt.....	140			
486	K. Reimer & Brother.....	Ninth and Richmond streets.....	Furniture.....	100		10	See No. 486.
487	Standard Printing Ink Works.....	108 West Canal street.....	Printing inks.....	6			
488	Hariman Brothers.....	57 ".....	Brass castings.....	10			
489	Henry Nowak.....	55 ".....	Cloaks.....	3	10		
490	Mollenkamp & Binne.....	53 ".....	Washing machines.....	3			
491	P. DeKoo.....	59 ".....	Brooms and whisks.....	15		1	
492	B. Meyer.....	61 ".....	Brooms.....	12		3	See No. 492.

483	John Threm	10 West Canal street	Malt shovels	5	1	See No. 493.
484	August Peters	11 " "	Iron railings	4	1	" " 494.
485	The A. J. English Co.	12 " "	Vapor stoves, etc.	5	2	" " 495.
486	John B. Morris & Co.	Canal and Jackson streets	Gray iron castings	32	4	
487	Julius Westermann	108 Canal street	Jewelry trays, etc.	13	2	See No. 498.
488	Charles W. Breunemann & Co.	383 Walnut street	Window shades	19	3	
489	Donaldson Lithographing Co.	Sycamore and Canal streets	Lithographic printing	38	10	
490	Chadfield & Woods	" "	Paper bags, etc.	18	5	See No. 501.
491	Enquirer Job Printing Co.	" "	Job printing	100	5	
492	Enterprise Carriage Manufacturing Co.	146 West Court street	Crackers and cakes	15	4	
493	George H. Strietmann	Plum and Canal streets	Malt liquors	80	6	See No. 505.
494	The Gerke Brewing Co.	112 West Court street	Lithographic printing	20	1	" " 506.
495	Cincinnati Lithographic Co.	296-304 Broadway	Carriage wood-work	43	11	" " 507.
496	Carriage Wood-work Manufacturing Co.	296-304 " "	Packing boxes	18	3	" " 508.
497	E. A. Conkling	Court street and Broadway	Pants and suits	8	30	
498	Hunter Manufacturing Co.	327-329 Broadway	Hemp twine	30	11	
499	George H. Bonie	39-63 Hunt street	Flour and feed	13	1	
500	H. Grotzsch & Co.	10-18 " "	Barbers' supplies	14	9	
501	The C. Klein Co. (Buckeye Mills)	96 West Canal street	Special machinery	9	15	
502	A. Gunklach & Co.	Court street and Broadway	Feed	4	3	See No. 515.
503	J. H. Day & Co.	560-568 West Sixth street	Furniture	60	25	
504	Canal Elevator and Warehouse Co.	Sixth and Hoadley streets	Saws, etc.	140	4	
505	Steinman & Meyer Furniture Co.	Baymiller street	Bank vaults, etc.	45	30	
506	Woodrough & McParlin	" "	Repairing locomotives	43	12	See No. 519.
507	C. Clements	374 West Sixth street	Confectioneries	5	50	
508	A. & W. Amberg	21-23 " "	Cigars	11	15	See No. 521.
509	C. H. & D. R. R. Shops	23 East Third street	Staw goods	7	2	See No. 523.
510	Simon Brothers	Plum and McFarland streets	Repairing gas meters	24	8	" " 524.
511	A. Davis, Sons & Co.	130 Elm street	Printing and binding	6	2	" " 525.
512	New England Staw Goods Works	176-178 " "	Human hair wigs, etc.	21	3	
513	J. R. Monfort	178 " "	Newspaper printing	36	3	See No. 528.
514	Nichols & Co.	98 East Eighth street	Carriage and buggies	9	2	" " 529.
515	Herald and Presbyter	98-99 " "	Gold and silver-plating, etc.	30	3	
516	L. D. Thompson	Ninth and Eggleston avenue	Packing boxes	16	2	See No. 531.
517	Mendel, Rosenberger & Co.	Court street and Eggleston avenue	Cold storage and ice	12	7	
518	Cincinnati Ice Mfg and Cold Storage Co.	90 East Eighth street	Laundry machinery	83	3	
519	F. M. Watkins & Co.	Eggleston avenue	Carriages and buggies	5	65	See No. 534.
520	Insoloro Carriage Co.	97-99 East Eighth street	Wood-working machinery	6	6	" " 535.
521	Charles E. Francis	272 Broadway	Paper boxes	4	30	See No. 538.
522	Wrigley Brothers	214-216 " "	Saddlery	13	2	
523	Perkins, Campbell & Co.	87-89 East Eighth street	Machinery	26	10	
524	A. Joseph Nurte	278-280 Broadway	Picture frames, etc.	34	13	
525	A. Joseph Nurte	299-279 " "	Polishing and warehouses	16	2	
526	J. W. Wayne	83-85 East Eighth street	Refrigerators	20	2	
527	Macbride Lithographing Co.	Baker street between Elm and Race	Engraving and printing	15	20	
528	Baldridge-Hogan Saw Co.	9 Vine and St. Water streets	Saws	60	47	See No. 544.
529	Jos. Joseph & Brothers	Front and Elm streets	Cotton and waste	23	5	" " 545.
530	D. R. Norton & Son	145-147 West Second street	Saw mills, etc.	20	10	
531	The Ohio Valley Press	141-143 Race street	Printing, etc.	47	47	
532	The Crain-Breed Manufacturing Co.	McLean avenue and Seventh street	Crackers, cakes, etc.	5	12	
533	D. Forester	126-128 West Second street				

CINCINNATI—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
547	Moeler Safe & Lock Co.	85-92 Elm street.	Safes, vaults, etc.	400		20	See No. 548.
548	Buehler & Wuest.	6-12 Burrow street.	Wheel hubs.	5		12	
549	E. Altemeyer & Co.	115-119 West Court street.	Dry goods, etc.	28	200	1	
550	Physicians Supply Co.	64 Lodge alley.	Model making.	7	1		
551	Corrigated Elbow Co.	Gano and St. Clair streets.	Corrigated elbows.	20		7	See No. 551.
552	Foutile & Co.	Race and Canal streets.	Patent process flour.	18	2	2	552
553	George Hackett.	235-237 Main street.	Boots and shoes.	61	27	12	553.
554	S. H. Hulstet & Co.	Sixth and Main streets.	Woolen hosiery.	2	70	35	
555	Guido, Kemper & Co.	232 Main street.	Paper bags, etc.	3	2		
556	K. Hugin & Son.	232	Shoe uppers.	4	3	1	See No. 556.
557	Krebs Lithographing Co.	138-142 Sycamore street.	Lithograph printing.	98	6	5	557.
558	The Sachs Shoe Manufacturing Co.	138-142	Fine shoes.	125	125		
559	Hennegan & Co.	138-142	Color printing.	10		3	See No. 559.
560	Morrison & Corcoran.	14 Gano street.	Metal-plating.	12		4	560.
561	Lockwood Printing Co.	16	Fine printing.	12			
562	Langenbrunner & Co.	19-21 Sycamore street.	Horse collars.	25		5	
563	Stribley & Co.	12 East Fourth	Shoes and slippers.	300	150	40	See No. 563.
564	Voige & Winter.	175 Main street.	Fine cigars.	13		1	
565	T. H. Berning	178	Saddles and harness.	35		6	
566	Graf, Morsbach & Co.	214-218	Metallic burial cases.	100		4	
567	American Burial Case Co.	146-148 East Front street.	Roofing machinery, etc.	8			
568	Geo. C. Keene & Co.	148-150	Wood and metal patterns.	12		1	
569	W. L. Mersfelder.	Front and Pike streets.	Upright drills.	25			
570	Bickford Drill Co.	186 East Front street.	Machinist, etc.	7			
571	H. J. McKeown.	212-216	Patent castings of all kinds.	11		1	See No. 572.
572	Samuel Williamson.	Butler street.	Copper and brass goods.	35		3	573.
573	Cordeman Machine Co.	189-204 East Front street.	Sash, doors and blinds.	30		5	574.
574	Bourbon Copper and Brass Works.	197-201	Brass founder, etc.	25		1	
575	Elias Ehler, Agent.	118 East Second street.	Knit hosiery, etc.	10		10	
576	Geo. Fewless.	Second and Ludlow streets.	Boilers and tanks.	5		2	
577	Sol. E. Bacharach.	Pearl and Lawrence streets.	Cigar makers' supplies.	66		12	
578	Mellvain & Spiegel.	165-169 East Pearl street.	Baking powder, etc.	15		20	
579	Miller, Dubrul & Peters M'f'g Co.	Pearl and Lawrence streets.	Carriages.	112		8	See No. 581.
580	Potter, Parlin & Co.	176-182 East Fifth street.	Safes, wardrobes, etc.	22			See No. 582.
581	Sechler & Co.	53-59	Carriage trimmings.	44		7	584.
582	Horton & Co.	551-553 West Eighth street.	Carriages and wagons.	22		1	
583	H. Kinds & Co.	137-141 East Pearl street.	Packing boxes.	30		11	
584	Standard Carriage Goods Co.	119-121 East Second street.	Brass founders.	17			
585	James Kidney.	122					
586	S. G. Rice, Agent.	102-104					
587	Vandusen & Tift.						

588	Honbort, Littleford & Co.	137-141 East Pearl street.	Metal perforators.	12	3	See No. 590.
589	The Bradford Mill Co.	Eighth and Evans streets.	Flour mill machinery.	35	2	
590	Muller Machine Tool Co.	Evans street, south of Eighth street.	Iron-working machines.	21	84	
591	U. S. Bunn Manufacturing Co.	"	Rungs, plugs, etc.	66	4	
592	The J. W. Marcy Co.	Eighth street.	Carriages wood-work.	10		
593	Shobbrook & Hencke.	John and Everett streets.	Furniture.	35	3	
594	The Bullman-Hugenberg Co.	84-88 Livingston street.	Hat racks, etc.	118	20	
595	Joseph Dreesch.	30-42 Bogen street.	Carriages and harness.	7		
596	Sayers & Seovill.	31-41 Colerain avenue.	Flour and feed.	3		
597	Henry Nagel.	82 McLean avenue.	Pork and beef packers.	108	9	
598	Wm. Buck & Co.	McLean and Harrison avenues.	Hat racks, etc.	10		
599	The Saxtro Furniture Co.	60 Riddle street.	Planing mill, etc.	20	1	
600	C. Schwind & Co.	90-92 Livingston street.	Sash, doors and blinds.	25	2	
601	Maxwell, Ginter & Co.	Harrison and Colerain avenues.	Tailoring.	8		
602	H. Levi.	138 Oliver street.	Cider and vinegar.	1		
603	F. Miller & Co.	230-232 West Pearl street.	Cigars.	35	6	See No. 604.
604	B. Daubenger & Co.	231-222 " "	Picture frames.	10	1	" 605.
605	Onken & Vance.	123 Central avenue.	Publishing.	1	7	" 606.
606	Way Publishing Co.	231-222 West Pearl street.	Caps, etc.	42	1	" 607.
607	Princess Knitting Mills.	236 West Third street.	Mercantile printing.	85	3	" 608.
608	Joseph Waechel.	Third street and Central avenue.	Decks.	140	2	
609	Dietz, Ienatus & Co.	216-218 West Pearl street.	Carriage wood-work.	16	2	
610	The A. L. Knoblaugh Co.	116-124 East Sixth street.	Iron and brass working.	20	2	
611	Lodge, Davis & Co.	188-154 " "	Printing inks.	21	4	
612	Ault & Wiborg.	Foot of New street.	Carriages.	3		
613	J. W. Gosling.	9-13 East Sixth street.	Wax candles.	8	32	
614	John Curtis.	Eggleston avenue.	Seals, wires and processes.	100	2	
615	Harkness, Cowling & Co.	151-153 Broadway.	Laundrying.	16	21	
616	Standard Seal, Wire and Press Co.	151-153 " "	Hat racks.	50	2	See No. 622.
617	Electric Laundry.	Culvert street and Harrison avenue.	Builders' iron work.	53	77	See No. 624.
618	Folding Hat Rack Co.	Eggleston avenue.	Drugs.	1		See No. 626.
619	Walton Architectural Iron Co.	Sixth street and Eggleston avenue.	Flour and feed.	8	1	" 627.
620	Cincinnati Corrugating Co.	140-146 Harrison avenue.	Splice mills, etc.	8		" 628.
621	W. S. Merrill Chemical Co.	305-307 " "	Barrels, tubs, etc.	4	22	" 629.
622	J. Dornette & Bro.	Queen City and Harrison avenues.	Laundrying.	45	5	" 631.
623	Theo. Von Holle.	Harrison avenue.	Ranges and furnaces.	3	1	
624	Adler & Co.	178 Harrison avenue.	Saddles and harness.	15	2	See No. 634.
625	The Herancourt Brewing Co.	Harrison avenue.	Steam engines etc.	9	2	See No. 635.
626	Eureka Mills.	280 Western avenue.	Laundry soap.	10		
627	L. J. Miller.	103-110 Division street.	Grocers' sundries.	12	4	
628	W. H. Schwenkmeier.	212 Elm street.	Iron roofing.	9		
629	The Hauser, Brenner & Fath Co.	25-27 West Fifth street.	Plug tobacco.	55		See No. 639.
630	Queen City Steam Laundry.	242 Main street.	Furniture.			
631	Wm. G. Fisher.	38-40 Sycamore street.				
632	A. S. Butterfield.	43 East Second street.				
633	H. J. Elfert & Co.	East Second street.				
634	Chas. Barnes & Co.	158-60 " "				
635	J. M. Long.	280-295 West Second street.				
636	The Anchor Mustard Co.					
637	W. G. Hyndman & Co.					
638	A. L. Dunlap & Co.					
639	Phoenix Manufacturing Co.					

*See also No. 226.

CINCINNATI—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
640	H. R. Droste & Co.	62-64 East Second street.	Coffee, spices, etc.	20	5	1	See No. 640.
641	H. Bude & Sons	19 "	Tobacco	3	5	1	" 641.
642	The Bradford Well and Pump Co.	23-25 "	Steam pumps, etc.	15			
643	A. Heschbrock & Co.	40-44 "	Cooperage	18		1	See No. 643.
644	Alex. Fries & Bros.	46-50 "	Chemicals	6			
645	Hart, Meade & Co.	52-54 East Third street.	Shoes	100	100	16	" 644.
646	The T. A. Snider Preserve Co.	49-51 Sycamore street.	Fruit, jellies, etc.	22	23	15	" 645.
647	P. Sullivan & Co.	54 East Third street.	Shoes	50	50	4	" 646.
648	The Royer Wheel Co.	340-362 West Third street.	All kinds of wheels	125		12	" 647.
649	Mills, Spellmire & Co.	373 "	Sash, doors, etc.	30		2	See No. 649.
650	Wm. Mayer	384-386 "	All kinds chairs	18	2	12	See No. 651.
651	B. Klinker & Co.	284-293 West Second street.	Electric light apparatus	13	2	4	" 652.
652	The Hill Electrical Works.	56 Longworth street.	Printers, etc.	6	3		
653	Williams Brothers.	56 "	Campaign goods	21	42	26	See No. 654.
654	Pettibone Campaign Supply Co.	Rear 148 West Fourth street.		12			
655	Geo. Fisher	231 Walnut street.	Lithograph printing	100	1	15	See No. 656.
656	Strobridge Lithographing Co.	124-132 Canal street.	Blank-casting, etc.	40	1	15	" 657.
657	Jas. Burdick, Jr.	52 Longworth street.	Printing, etc.	70	5		
658	J. G. Murtlock & Co.	136 West Fifth street.	Harness, etc.	3			
659	Standard Harness Co.	209-213 West Fifth street.	Engineering instruments	4			See No. 661.
660	Herman Pastor	10 Home street.	Machinery	103	57	1	" 662.
661	Jos. J. Mienfeld	150 West Fourth street.	Machinery	6			" 663.
662	Western Methodist Book Concern.	Rear 170 Flinn street.	Type and electrotyping	85	35	8	
663	Keck & Co.	10 Home street.	Jewelry	10	3	4	
664	J. G. Isham & Co.	168 Walnut street.	Cigars	8			See No. 668.
665	Franklin Type Foundry.	400-407 Main street.	Canned goods	85	125	45	
666	Gerlach & Strank	180 Walnut street.	Mineral waters	15		1	
667	Albert Wendel	400-407 Main street.	Trunks, valises, etc.	6			
668	Henry Verhage	274-272 Sycamore street.	Harness	14			See No. 672.
669	Cincinnati Soda Water and Ginger Ale Co.	270-272 "	Furniture	9		1	" 673.
670	M. A. McNulre	34 East Fifth street.	Cream bread	35			
671	D. Peppari	30-32 "	Beer	37			
672	Alex. Riegler	20 Perry street.	Shoes, etc.	125		3	See No. 678.
673	F. Lammers & Sons	252-254 Betts street.	Mantels, etc.	81		40	" 679.
674	Henry H. Fricke	531-535 West Sixth street.					
675	H. Luckman	531-523 "					
676	J. & H. Simkinson & Co.	216-218 West Fourth street.					
677	D. H. Baldwin & Co.	138 "					
678	L. H. Schaeffer & Co.	118-124 Harrison avenue					
679	Hess Brothers	83 Race street.					
680	Pioneer Spice Mills	90 West Second street.					

681	Robert T. Morris	65 Vine street	Printing	18	2	6	See No. 682.
682	E. J. Wilson & Co	48 West Second street	Coftes, spices, etc	12	2	4	See No. 684.
683	Cincinnati Tin and Japan Co	83-85 Walnut street	Tinware	13		2	See No. 685.
684	George P. Vieken	118-120 Harrison street	Machinery	6		1	
685	Mrs. George Albert	170 West Third street	Cloth sponging	8		5	
686	Jewett & Adams	79-81 Race street	Paper bags, etc	20	12	1	
687	The Huss Bros. Co	129 West Second street	Store fixtures, etc	11		3	See No. 688.
688	Singer Sewing-machine Co	131	Readjusting, etc	4		1	See No. 689.
689	Jonathan Krueger's Sons	133	Steam brick machines	90		2	"
690	O. J. Shafer	137-139	Pattern work	4		2	"
691	The Globe Foundry	133-139	Castings	5		2	"
692	John Crowley	137-139	Machinery	4		2	"
693	W. Osterlein	161-166	Belt friction clutches	40	2	1	
694	Easton & Clark	170-172	Carriages, etc.	12	1	6	
695	Cordeman, Meyer & Co	218 West Second street	Wood-working machinery	70		1	
696	The Laidlaw & Dunn Co	141-143	Steam pumps, etc	3		1	
697	Peter J. Dunn & Co	224	Brass goods	20		1	
698	Eclipse Pump Manufacturing Co.	216-218	Furniture finishing	13		3	
699	Central Furniture Association	57-61 Elm street	Machinery tools	35	1	8	See No. 702.
700	McFarlan & Nottingham	121-129 Carr street	Carriages, etc.	75	15	9	
701	Mayer Buggy Co	659-661 West Seventh street	Sash doors, etc	40		4	See No. 704.
702	Robinson Planing Mill Co	Carr street	Flour and feed	65	5	5	"
703	Cincinnati Chair Co	71-74 Budd street	Furniture	3	13	8	"
704	Sam. W. Weldler	317 Baymiller street	Tailoring	2	25	6	"
705	Central Furniture Association	Dudley and Wade streets	Cigars	25	30	5	
706	John Dames	29 West Pearl street	Ice cream freezers	6		7	
707	Peter Marks	23	Coffee and spices	30		7	
708	Manheimer & Co	9	Trunks, etc.	7		6	See No. 713.
709	J. Hamberger & Co	6	Tailoring	17		1	
710	Kingery Manufacturing Co	110 West Third street	Corn mills	2		15	See No. 715.
711	Eagle Coffee and Spice Mills	Wade and Jones streets	Clothes-wringers	25		10	
712	N. Drucker & Co	Front and John streets	Patent block chairs	50	60	10	
713	Cross & Scherm	John and Augusta streets	Cabinet ware	125		4	
714	Straub Machinery Co	12-16 Augusta street	Vases	40		7	See No. 719.
715	Peerless Windmill	Regina street	Cool beds	23		3	"
716	George Feldkamp	Barren street	Castings	25		18	"
717	Kroeger, Sabbert & Co.	185-197 Wade street	Engines	45	25	3	See No. 723.
718	C. H. Burton & Co.	41-43 Race street	Job printing	5		1	"
719	Victor Knecht	40-48 West Water street	Cigars	21		8	See No. 724.
720	Phoenix Iron Foundry	Walnut and Water streets	Job printing	8		10	See No. 725.
721	Mendel, Rosenberger & Co	27 Walnut street	Cigars	30		1	"
722	H. F. Frisbie	61	Pickles, etc	50	1	2	727.
723	H. F. Frisbie	Vine and Water streets	Carriages, etc	4			
724	John C. Heidrich & Co.	701 Logan street	Pork packers, etc	75			
725	Barr, Wendle & Co.	701-703 Central avenue	Steam stone works	8			
726	J. Weller & Co	Elder and Logan streets	Wood seat chairs	14			See No. 731.
727	Pethless & Schaeffer	48 Logan street	Chair builders	3			
728	John Auel & Co.	12-14 Wade street	Tailoring	14			
729	Geo. Schranders' Sons	51 Findlay street	Lead pipe, etc	3			
730	David Hammel	21-23 East Ninth street		14			
731	Theo. Winterling						
732	Hillman & Poes						
733	I. Greenfield						
734	Cin. Lead Pipe and Sheet Lead Works						

CINCINNATI—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
735	Clark & Hawley.....	15-19 East Ninth street.....	Pipe fittings.....	7	.....	2	.....
736	Henry Nelson.....	510 Plum street.....	Monuments.....	1	7	3	See No. 735.
737	Wm. Randall & Son.....	226-246 West Court street.....	Builders' stone.....	22	.....	.....	.....
738	J. R. Leubke.....	Wed Plum street.....	Furniture.....	25	.....	.....	.....
739	Hunt Street Furniture Co.....	126-128 Hunt street.....	Window shades.....	4	.....	1	See No. 738.
740	Cincinnati Shade Cloth and Window Shade Co.....	135 Broadway.....	Stair building.....	32	.....	1	" 740.
741	F. E. Evans & Co.....	126-128 Hunt street.....	Building stone.....	30	.....	1	" 741.
742	Wm. Grimeson & Co.....	130	Wood turning.....	3	.....	.....	.....
743	Ignatz Woertz.....	Hunt and Abigail streets.....	White and red lead.....	50	.....	.....	.....
744	Eagle White Lead Co.....	20-26 Spring street.....	Contractors, etc.....	10	.....	1	See No. 745.
745	Belmont & Overbecke.....	144 Hunt street.....	Tailoring.....	65	.....	2	" 746.
746	Jas. Griffith & Sons.....	Hunt and Abigail streets.....	Mineral waters.....	4	9	1	" 747.
747	Mrs. Augusta Myers.....	46 McMicken avenue.....	Bread, etc.....	1	.....	.....	" 748.
748	Carstens Brothers.....	86-88	Spring wagons.....	13	1	2	See No. 751.
749	Geo. Jacob & Son.....	8-7 Corwin street.....	Builders' iron work.....	10	.....	.....	.....
750	Co-operative Baking Co.....	McMicken avenue and Corwin street.....	Machinery.....	10	.....	2	See No. 754.
751	Louis J. Kloppe.....	13	Flows, etc.....	10	.....	1	.....
752	Ignatz Grinn.....	614 Main street.....	Iron railing, etc.....	17	.....	.....	.....
753	Val. Link & Son.....	618-620	Flour mills, etc.....	6	.....	.....	.....
754	A. J. Gunter.....	326-328 Walnut street.....	Coffee and spices.....	15	.....	.....	.....
755	Wm. Schumacher.....	428-444	Carriages, etc.....	10	.....	2	See No. 758.
756	John Schneider, Son & Co.....	428-430 Race street.....	Stair building.....	15	.....	2	" 759.
757	Samuel Doll.....	372 Elm street.....	Carriages, etc.....	45	1	2	.....
758	L. Hayekotte & Co.....	669-671 Central avenue.....	Oak-tanned leather.....	20	.....	.....	.....
759	D. Rohan's Sons.....	24 North Providence street.....	Pork packers, etc.....	10	.....	.....	.....
760	Wm. Aufderheide & Co.....	Findlay and Canal streets.....	Copper works.....	14	.....	.....	.....
761	Cincinnati Oak Leather Co.....	734-736 Central avenue.....	Harness leather, etc.....	34	.....	.....	See No. 764.
762	Chas. Jacob, Jr. & Son.....	39-41 Dunlap street.....	Oak sole-leather.....	10	.....	.....	.....
763	Martin Haller.....	17	Leather finishing.....	13	.....	.....	.....
764	Cincinnati Oak Leather Co.....	65-67 Livingston street.....	Oak leather.....	23	.....	.....	.....
765	E. S. Nepper.....	581-583 John street.....	Foundry work, etc.....	25	.....	3	.....
766	Halsemann Brothers.....	62-68 Plum street.....	Iron and copper work.....	40	.....	.....	.....
767	Halsemann Brothers.....	McMicken avenue and Dunlap street.....	Seltzer water.....	5	.....	.....	.....
768	Haffner Brothers.....	712 Race street.....	Cigars.....	8	.....	.....	.....
769	John F. Frisch, Trustee.....	31 Clifton avenue.....	Mineral waters, etc.....	5	.....	.....	.....
770	Chas. Berckheimer & Co.....	190-192 McMicken avenue.....	Leather.....	6	.....	1	.....
771	W. T. Wagner's Sons.....	East Plum street.....	.....	42	.....	.....	.....
772	F. Rathkamp.....	.....	.....	.....	.....	.....	.....
773	Fred. Schorr.....	.....	.....	.....	.....	.....	.....
774	Ranche Brothers.....	.....	.....	.....	.....	.....	.....

775	F. & C. Wuest.	394-396 McMicken avenue.	Business wagons.	15	2	See No. 775.
776	Union Omnibus and Wagon Co.	749-751 Central avenue.	Omnibuses, etc.	11	1	" 776.
777	Philip Jung.	302-308 McMicken avenue.	Wagons.	10	1	" 777.
778	D. H. Hunnewell.	552 Plum street.	Soup, candles, etc.	10		
779	F. Lettemeyer.	Hunt street.	Carriages.	9		
780	Fred Helmas.	45 Moore street.	Tailoring.	2	9	See No. 779.
781	Joseph Foster.	West side Hunt street.	Marble, freestone, etc.	50	2	" 780.
782	T. J. Orr & Co.	65-67 Gilbert avenue.	Carriages.	6	2	" 782.
783	Lowry & Goebel.	167 Elm street.	Carriages, etc.	25	12	
784	Eden Park Cotton Mills.	609-611 Gilbert avenue.	Hosiery yarn.	20	16	
785	John L. Colter.	101-103 East Second street.	Stained glass.	18	8	
786	P. Huber & Co.	319 Main street.	Candy.	5	3	
787	Frank Schwarz.	169 Central avenue.	Cigars.	20	3	
788	Julius Knopf.	221 West Fourth street.	Society goods.	4	2	
789	Guy Manning.	162 Elm street.	Stoves, etc.	2	1	
790	Miami Stove Works.	98-100 East Second street.	Trunks, etc.	10	1	
791	Cook & Bankhardt.	142 Walnut street.	Printing, etc.	24	2	See No. 791.
792	William Skinner & Co.	47 Main street.	Tinware.	12		
793	J. H. Gray & Co.	24 West Second street.	Coffees, spices, etc.	15	2	
794	W. H. Harrison & Co.	68 Walnut street.	Printing and binding.	5	1	
795	Carpenter & Ranshaw.	128-130 "	Job printing.	30	10	
796	The A. H. Pugh Printing Co.	Rear 125½ Walnut street.	Job printing.	65	8	
797	Keating & Co.	180 Walnut street.	Office outfitting.	14	1	
798	W. B. Carpenter & Co.	128-132 "	Cloth sponging.	12		
799	Maxwell & Rothschild.	238 West Third street.	Clothing.	5	1	
800	M. C. Manning.	116 Baker street.	Steam fitting.	3		
801	Kahn, Sturm & Co.	Third and Race streets.	Clothing.	16		
802	Cohn, Brothers & Co.	118-120 West Third street.	"	17		
803	Goldman, Thurman & Co.	152-154 "	Packing boxes.	25	1	
804	J. & J. M. Johnston.	219-221 "	Clears.	23	2	See No. 804.
805	John Kirk.	67 Main street.	Shoes.	6		
806	H. Kruse & Co.	86-88 "	Shoe cases.	18	1	
807	Scherder, Rusche & Co.	87 "	Saddles, etc.	20	2	
808	The Wrightson Printing Co.	13 West Fourth street.	Book and job printing.	28	4	
809	D. S. Garrick Saddlery Co.	Fourth and Main streets.	Cooking-stoves, etc.	28	21	
810	John Grossius.	380 Main street.	Suspenders.	5	1	
811	The Cincinnati Suspender Co.	11 East Ninth street.	Job printing.	10		See No. 811.
812	Boake & Miller & Co.	Third and Walnut streets.	Woolen rugs, etc.	4	20	" 812.
813	Jacob Winkler & Co.	36 Main street.	Publishing, etc.	5	3	" 813.
814	Cincinnati Publishing Co.	169 Elm street.	Knit caps, etc.	2	15	" 814.
815	The Western Cap and Knitting Co.	214 "	Cigars.	2	8	" 815.
816	The John T. Hoeb Cigar Co.	1-3 Water street.	Job printing.	25	15	
817	Charles H. Fish.	234 Elm street.	Stamping tinware, etc.	6	3	See No. 817.
818	Fred E. Stolz.	59 West Twelfth street.	Carpets.	4	17	
819	The Cincinnati Stamping Co.	386-402 Walnut.	Jewelry.	60	2	
820	George F. Oile & Co.	138 West Fourth "	Clothing.	88	20	
821	G. B. Thomas & Co.	138-140 "	"	5	23	
822	G. Lautenschlager & Marks.	119 West Fifth "	Book-binding.	10	2	See No. 801.
823	Marks Brothers & Marks.	138-138 Race street.	Directory printing.	20		
824	Goedicks, Miller & Rupel.	Third and Race streets.	Hardware, etc.	30		
825	Stull, Kruse & Co.	138 Race street.		40		
826	W. H. Hoffman.	80 Longwood street.		4	1	See No. 806.
827	Williams & Co.	50 Plum street.		15	30	" 806.
828	The James L. Haven Co.			300		" 907.

CINCINNATI—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Male.	Females.	Minor.	
908	Howell & Co.	25-27 East Third street.	Laundrying.	5	16	3	See No. 908.
909	The Henry Stibel Printing Co.	19 "	General printing.	1	1	1	" 909.
910	Beers & Kinney	29 "	Job printing.	2	7	3	See No. 911.
911	Oppenheimer, Fecker & Co.	Third and Main streets.	Printing and binding.	3	7	3	" 912.
912	W. T. Eichelberger	36 West Fifth street.	Jewelry.	0	2	2	" 913.
913	James O. Connor	177 Race street.	Stamp cutting.	7	4	4	" 914.
914	Henry G. Meyer & Co.	177 West Fifth street.	Cigars.	6	2	2	
915	C. F. Becker	Fifth and Walnut streets.	"	8			
916	H. H. Schlomer	122 West Fifth street.	"	4			
917	Frederick Funk	28 East Sixth street.	Book and shoe machinery.	4	2	2	See No. 918.
918	Ross, Meyer & Co.	135 Sycamore street.	Book-binding.	25	1	1	See No. 920.
919	Henry Hassel	142 "	Gold leaf.	4	3	2	
920	David Reeves	160 Main street.	Button holes.	5	7	1	
921	J. F. W. Rabbe	160-162 "	Job printing.	1	4	4	
922	Dittgen & Co.	36 East Fifth street.	Gold and silver leaf.	4	2	2	See No. 923.
923	J. Kirchner	144 Main street.	Cigars.	21	2	2	See No. 925.
924	J. R. R. Lindner	Fourth and Main streets.	Military and masonic goods.	4	2	2	
925	J. C. Ritchie	"	Watch cases.	3	1	1	
926	Peter Henry	228 Walnut street.	Woollen and cotton hosiery.	2	10	1	
927	Chas. Wust & Co.	71 West Sixth street.	Surgical instruments, etc.	7	2	2	
928	Wm. Autenreith	327-329 Plum street.	Wagons.	15			
929	The Ohlson Wagon Co.	377 Central avenue.	Cigars.	4	1	1	
930	Chas. W. Anschuetz	234 West Pearl street.	Military goods.	4	3	3	See No. 931.
931	Enterprise Variety Works.	Fourth and Walnut streets.	Importer of diamonds.	6	3	3	" 932.
932	Oskamp, Nolting & Co.	Ninth street and Freeman avenue.	Laundrying.	11	17	8	
933	Excelsior Steam Laundry.	"	Laundry machinery.	2	2	2	
934	The A. M. Dolph Co.	"	Carriages.	45	3	2	
935	Anchor Ruggy Co.	382 Freeman avenue.	Cigars.	3			
936	Wm. Ulrich	Fifth and Plum streets.	Clothing.	16	50		
937	Geo. H. Verkamp	(Central avenue and Front street.	Stoves, etc.	50	10		See No. 938.
938	Stroتمان & Derkes.	Denman and Florence streets.	Boxes.	6	2	2	" 939.
939	Acme Elevator Works.	47 Water street.	Elevators.	4			
1020	King & Bastian	181 Vine street.	Shirts.	6	9		
1021	C. Kirchheimer	100 West Court street.	Candy.	3	1	1	
1022	C. & C. Laundry	127 Fifth street.	Laundrying.	2	9		
1023	Vanduzen Gas Engine Co.	92 East Second street.	Gas engines.	7			
1024	The Globe Soap Co.	29-37 Water street.	Laundry soap.	37			See No. 1025.
1025	Meyer, Nagel & Co.	82-84 East Second street.	Cigar boxes, etc.	30	20	10	" 1026.
1026	The H. M. Merrill Drug Co.	134 West Sixth street.	Drugs and chemicals.	12			
1027	T. J. Curtis.	Elm and George streets.	Dyeing, etc.	3	1	1	

1029	Christ, Hecker	246 Elm street	Tool grinding	4	4	
1030	H. Lintner	321 Central avenue	Cigars	18	4	
1031	Julius Adler	221 West Court street	"	4	4	
1032	John Soetle	419 Central avenue	"	3	3	
1033	Chris. Fortriede	423	Wagons	8	8	
1034	Henry Manning	135-137 West Liberty street	Stained glass work	15	8	
1035	Arctic Glass Painting Co.	3 West Fifth street	Cut stone	20	4	
1036	F. Stalzburg & Co.	98-100 East Front street	Window shades	4	4	
1037	J. & E. H. Kirk	89	Copper work	18	2	See No. 1038.
1038	Hoffman & Ahlers	85-87	Wire goods	11	1	
1039	The Cincinnati Manufacturing Co.	18 Hammond street	Wood and ivory turning	8	3	
1040	Henry Linzer	19 West Fourth street	Jewelers' supplies	7	4	
1041	E. & J. Schmeltzer	19	Flour, etc.	4	4	
1042	H. Weber & Co.	Apple and Blue Rock streets	Sash doors, etc.	25	26	10
1043	Caleb Lingo & Co.	Hamilton avenue and Lingo street	Shoes	16	3	1 See No. 1045.
1044	Joseph C. Tarrant	29 Hamilton avenue	Sash doors, etc.	3	25	" 1046.
1045	Fred. Weber & Bro.	Cherry street	Tailoring	400	26	
1046	John Deleach	Blue Rock street	Leather	103	18	2
1047	American Oak Leather Co.	Keener street and Dalton avenue	Ranges	5	2	See No. 1050.
1048	Eureka Foundry Co.	125-126 East street	Mantels, etc.	100	10	2
1049	The John Van Range Co.	169 Elm street	Laundry	25	25	10
1050	The Snow Flake Laundry	8 East Fourth street	Mattresses, etc.	4	6	See No. 1053.
1051	Herman Wessell	67 West Fifth street	Electrotyping, etc.	100	10	" 1054.
1052	McKay & Co.	233 Vine street	Printing and binding	4	6	
1053	S. Rosenthal	201	Type and presses	15	45	
1054	Cincinnati Type Foundry	36 West Fourth street	Blank books, etc.	4	3	
1055	Joseph I. Sawyer	149 Main street	Paper stock, etc.	4	14	
1056	The Poundford Stationary Co.	37-39	Shore	15	35	12
1057	Chas. Field & Woods	62 West Fourth street	Umbrellas, etc.	85	25	14
1058	M. J. Clark	61-65	Printing, etc.	35		
1059	Robert Clarke & Co.	Harrison avenue	Barn and feed mills	15		
1060	Consolidated St. R. R. Co.	Mt. Auburn	Power house	12		
1061	Mt. Auburn Cable St. R. R.	Mt. Adams	Barn and feed	10	2	
1062	Mt. Adams and Eden Park R. R.	374 Main street	Mattresses	83	10	
1063	Joseph Wiest	20-22 East Eighth street	Awnings, etc.	3	6	
1064	John Eyring	230 Walnut street	News and job printing	2	6	
1065	Vines-Star Publishing Co.	217	Book-binding	3	8	
1066	F. Sellenings	217	Job printing	22	7	See No. 1069.
1067	Phil. J. Anthie	1051 Vine street	Cigars	3	3	
1068	P. F. Caracaba	1050-1053 Vine street	Power and machine shops	14		
1069	Geo. A. Sawyer	Vine street Hill	Power house	14		
1070	Vine Street Consolidated Street R. R.	Head Main street	Job printing	8		
1071	Mt. Auburn Incline R. R.	170 Race street	Show printing, etc.	6	2	See No. 1090.
1072	P. T. Schultz	Sixth and Lock streets	Elevators	250	300	2
1073	The Russell-Morgan Printing Co.	123 East Eighth street	Cotton goods	55	200	100
1074	H. J. Reedy	Fifth and Lock street	Book-binding	15	14	13
1075	H. Pearce Sons	139 Walnut street	Publishers, etc.	275	125	10
1076	H. C. Sherick	137				
1077	Van Antwerp, Bragg & Co.					

LINWOOD.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
241	Linwood Furniture Co.		Furniture	24	.....	3	See No. 241.
242	The Ferris Hame Co.		Hames	30	3	" 242.

READING.

247	Diehl Fire Works Co.		Fire-works	22	20	13	See No. 247.
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LOCKLAND.

248	The Stearns & Foster Co.		Cotton batting etc.	78	20	See No. 248.
249	The Lockland Lumber Co.		Builders' wood-work, etc.	65	20	" 249.
337	The Friend & Fox Paper Co.		Paper	35	40	.....	" 337.
338	George H. Friend Paper Co.	Rufner street	"	21	.....	4	" 338.
339	J. H. Tangeman		"	15	.....	.....	" 339.
340	The Holdeman Paper Co.	South of Lockland	"	32	2	.....	" 340.
341	The Holdeman Paper Co.	Benson street	"	30	.....	.....	" 341.
342	The George Fox Starch Co.	On canal	Starch	80	12	15	" 342.

HARDIN COUNTY.

KENTON.

940	Champion Iron Fence Co.	Columbus street	Iron fencing, etc.	120	.....	5	See No. 941.
941	John Callam & Co.	Market and Ohio streets	Doors, sash, etc.	12	.....	.....	" 942.
942	John Callam & Co.	North street	Building material	6	.....	.....	" 943.
943	G. H. Palmer & Co.	Main and Detroit streets	Chair stock, etc.	50	.....	2	" 944.
944	Stanton Straws Board Co.	Near C. & A. R. R.	Straw boards	83	.....	.....	.....
945	Pool Brothers	Franklin and Wayne streets	Carriages, etc.	8	.....	.....	.....
946	Smith & Smith	East Franklin street	Wood and iron novelties	10	.....	.....	.....
947	Carl & Canaan	Near C. S. & C. R. R.	Chair stock, etc.	24	.....	.....	.....
948	J. C. Schenck	Main street	Handles, etc.	9	.....	.....	.....
949	Kenton Milling Co.	South street	Flour, etc.	7	.....	.....	.....
950	Vinton Milling Co.	South street	Lumber	6	.....	.....	.....
951	Young & Brainerd	Near C. S. & C. R. R.	.....	19	.....	.....	.....
952	William Campbell	West Franklin street	Staves and headings	20	.....	8	.....

HIGHLAND COUNTY.

GREENFIELD.

1086	Greenfield Enterprise.....	Washington street.....	Printing, etc.....	6		
1087	J. P. Lowe & Co.....	East Main street.....	Carriages, etc.....	10	2	
1088	Greenfield Woolen Mills.....	Near O. S. R. R.....	Blankets, etc.....	6		See No. 1098.
1089	D. Welshimer & Son.....	Main street.....	Flour, etc.....	4		
1100	Greenfield Planing Mill.....	Washington street.....	Doors, sash, etc.....	5		
1101	E. L. McClain.....	".....	Sweat collars, etc.....	100	60	18
1102	John M. Waddel Manufacturing Co.....	".....	Coffee mills.....	25	8	See No. 1102.
1103	The Gig Saddle Co.....	Near C. W. & B. R. R.....	Gig saddles, etc.....	14	8	

LEESBURG.

1104	The Weekly Buckeye.....	Main and Fairfield streets.....	Printing.....	4		
1105	Hardy Mills.....	North of town.....	Flour, etc.....	5		
1106	The Leesburg Shoe Manufacturing Co.....	Near C. W. & B. R. R.....	Shoes.....	20	18	
1107	L. Pensyl & Davis.....	Fairfield street.....	Flour, etc.....	4		

HILLSBORO.

1108	The News-Herald.....	Main street.....	Printing.....	5		
1109	Hillsboro Gazette.....	Main and Court streets.....	" etc.....	6	2	
1110	Carroll & Downham.....	Court House square.....	Carriages, etc.....	20		
1111	J. S. Ellifritz & Co.....	South street.....	Blankets, etc.....	13	5	3
1112	J. W. Pence.....	West and Walnut streets.....	Building material.....	5		
1113	Enterprise Planing Mill.....	West street.....	Doors, sash, etc.....	8		
1114	Evans & McGuire.....	Beach street.....	Flour, etc.....	5		
1115	C. S. Bell & Co.....	Main and West streets.....	Bells, etc.....	60		
1116	Richards & Ayre.....	Near depot.....	Flour, etc.....	3		
1117	J. M. Boyd & Co.....	".....	".....	21		
1118	C. A. Roush & Co.....	Near railroad.....	Lumber.....	7		See No. 1118.

LYNCHBURG.

1119	Lynchburg Distillery.....	Main street.....	Whisky.....	60		
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LOGAN COUNTY.

BELLEFONTAINE.

869	Miller Carriage Co.....	Everett street.....	Carriage wood-work.....	5	1	See No. 869.
870	Mack Dickinson & Co.....	Near railroad.....	Chair stock, etc.....	60	4	" 870.
871	Chichester & Haviland.....	".....	Chairs.....	35	2	" 871.

BELLEFONTAINE—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
872	Bellefontaine Carriage Body Co.	Pratt street	Carriage bodies, etc.	25			
873	A. J. Miller & Co.	Everett street	Carriage wood-work	12			
874	Colton Brothers	West Columbus street	Flour, etc.	16			
875	Miller & Kiplinger	Detroit street	Carriages, etc.	7			
876	Williamson & Lesourd	Columbus street	Doors, sash, etc.	6			
877	Miller Carriage Co.	Chillicothe street	Carriage bodies	33			
878	David C. Green	"	Lumber	5			

MERCER COUNTY.

CELINA.

996	Krenning Woolen Mills	Main street	Blankets, etc.	4	5	1	
997	Celina Machine Works	"	Machinshop	7			
998	W. B. Nimmons	Warren and Ash streets	Barrel and feed	45			
999	W. H. Beery	Main street	Flour and feed	4			
1000	Timmonds & Barry	Walnut street	Dry goods, etc.	6			See No. 1000.
1001	A. Wykoff & Son	Payette street	Carriages, etc.	10			
1002	Celina City Mills	Main street	Flour, etc.	3			See No. 1002.

MIAMI COUNTY.

PIQUA.

288	The Piqua Straw Board Co.	884 Main street	Paper and straw board	60		2	See No. 288.
289	Boydlie Brothers	817 Downing street	Machinery and castings	13			
290	I. J. Whitlock	Bone street and Broadway	Builders' wood-work	25			See No. 290.
291	C. A. & C. L. Wood	West Water street and Covington avenue	"	30			" 291.
292	The Frische Brothers	688-688 West Water street	Furniture	10			" 292.
293	The Wood Linseed Oil Co.	College street and Covington avenue	Linseed oil, etc.	8			" 293.
294	The Piqua Manufacturing Co.	West Water street	Mattresses, etc.	12	20	3	" 294.
295	L. W. Filiebrown	1001 West "	Machinery	5			

296	The Piqua Handle Co.....	West High street.....	Agricultural implements.....	40	3	See No. 296.
297	The Piqua Straw Board Co.....	North and Washington streets.....	Paper.....	25		" 297.
298	The Piqua Ost-meal Co.....	South of Piqua.....	Corn-meal.....	10		" 298.
299	Snyder & Son.....	845 Main street.....	Carriage shafts, etc.....	110	1	" 299.
300	C. F. Rankin & Co.....	101 Downing street.....	Handlers of malt, etc.....	15		" 300.
301	Leonard Linseed Oil Co.....	Wayne and Sycamore streets.....	Linseed oil, etc.....	20		
302	W. P. Orr Linseed Oil Co.....	105 Main street.....	".....	22		
303	J. L. Sonneyer.....	Spring and Water streets.....	Lager beer.....	4		
304	Mrs. E. E. Frewald.....	301 East Water street.....	Flour, etc.....	5		
305	The Piqua Hosiery Co.....	316 Spring street.....	Hosiery.....	5	61	See No. 305.
306	The F. Gray Co.....	Spring and Water streets.....	Woolen blankets, etc.....	25	37	" 306.
307	L. C. & W. L. Cron & Co.....	201 Main street.....	Furniture.....	150	15	" 307.
308	Cron, Killa & Co.....	222 Second street.....	".....	158	20	" 308.

TROY.

309	Troy Spring Wagon and Wheel Co.....	Crawford street.....	Carriages, etc.....	110	5	12	See No. 309.
310	The Troy Buggy Works.....	J. E. & W. and D. & M. crossing.....	Buggies, etc.....	115	6	25	" 310.
311	Kelley & Sons.....	Crawford street.....	Wind mills, etc.....	8			" 311.
312	John & William Youtcy.....	East of D. & M. R. R.....	Lumber.....	5			" 312.

MONTGOMERY COUNTY.

DAYTON.

54	Fridman & Rothenberg.....	200 Warren street.....	Cigars.....	15	3		See No. 55.
55	Joseph Shaefer.....	Rear 215 Warren street.....	".....	20	110	25	" 56.
56	Uhman & Bloom.....	330 Warren street.....	".....	10	75	50	" 57.
57	Shaefer & Mahrt.....	Hickory and Brabham streets.....	Builders' wood-work.....	20	140	25	" 58.
58	C. Wight & Son.....	Sears street and Monumental avenue.....	Cigars.....	55		2	" 59.
59	Moses Glas.....	Fifth and Jackson streets.....	Tobaccoes.....	12	18	1	" 60.
60	The Merchants' Tobacco Co.....	Merchants' alley.....	Carriage whips.....	20	18	6	" 61.
61	M. J. Houck & Co.....	228½ East Fifth street.....	Laundrying.....	6	3	2	" 62.
62	Kemp & Kinney.....	204.....	Soap.....	2	12		See No. 80.
63	Hewitt Brothers.....	116-118 East Sixth street.....	Printing and publishing.....	6		2	" 81.
64	Christian Publishing Association.....	Sixth and Main streets.....	Bar fixtures, etc.....	18	3		" 82.
65	H. Hoedler & Co.....	107-109 Commercial street.....	General machinery.....	15		1	See No. 83.
66	W. P. Callahan & Co.....	93-919 East Third street.....	Shirts.....	60	130	6	" 84.
67	T. P. Long.....	283-297 East Sixth street.....	Agricultural implements.....	10	130	5	" 85.
68	Stoddard Manufacturing Co.....	Third and Bainbridge streets.....	Flour, etc.....	450	5	22	" 86.
69	Kratochwell Milling Co.....	East Sixth street.....	General machinery.....	20			See No. 88.
70	J. R. Johnson & Co.....	32 South Wayne street.....	Agricultural implements.....	115		8	" 89.
71	Peirce & Coleman.....	132.....	Carriage wheels, etc.....	75			" 90.
72	The Ohio Bake Co.....	Pine street, near Fourth.....	Agricultural implements.....	80		10	" 91.
73	Zwick, Greenwald & Co.....	548-518 East Third street.....	Paper boxes, etc.....	140		8	" 92.
74	Farmers' Friend Manufacturing Co.....	Wayne and State streets.....	School seats, etc.....	23	60	10	See No. 94.
75	Crunce & Sefson Manufacturing Co.....	16 Ziegler street.....		10			
76	Bradup & Co.....	Bayard and Perry streets.....		10			
77	Boyer & McMaster.....	Bayard street.....		30			

DAYTON—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.			For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	Minors.	
95	Stout, Mill & Temple.	Bayard and Ludlow streets.	Mill machinery, etc.	150	16		See No. 96.
96	Hoskot & Young.	South Ludlow street.	Laundrying.	2	5	20	" 97.
97	McHose & Lyons.	Ludlow and Bayard streets.	Bridge iron works, etc.	169	5	20	" 98.
98	Joseph Shaefer.	215 Warren street.	Cigars.	16	120	40	" 99.
99	Shaefer & Mahrt.	Hickory and Brabham streets.	"	20	115	50	" 100.
100	Bloom, Gerwels & Co.	330-332 Warren street.	"	7	125	73	" 101.
101	Hofritz & Keyer.	Wyandot street.	Cigar boxes.	11	15	5	" 102.
102	W. W. White.	19-21 East Fourth street.	Tables and stationery.	3	9	2	
103	Walker & Walker.	26 Kenton street.	Printing.	10	2		
104	Keller, Reed & Co.	505-507 East Third street.	Laundrying.	12	42		
105	Murray & Hannah.	509	Carriages.	15			
106	U. B. Publishing House.	Main and Fourth streets.	Printing and publishing.	60	35	4	See No. 106.
107	Buckeye Iron and Brass Works.	324-328 East Third street.	Machinery, etc.	175	10		" 107.
108	Miller Brothers.	Canal street.	Cigars.	15	43	15	" 108.
109	Thomas Nixon & Co.	First and Canal streets.	Paper bags.	15	11	2	" 109.
110	Dayton Leather and Collar Co.	11 East Spratt street.	Leather.	9			
111	Laubach & Iddings.	133-139 Canal street.	Paper novelties.	14	75	30	See No. 111.
112	Schaefer & Co.	132 East First street.	Lawn rakes.	5	1		" 112.
113	G. Stomps & Co.	224-223	Chairs.	125	3	58	" 113.
114	Nixon Nozzle Machine Co.	First and Canal streets.	Sprinkling machines.	15			
115	Nixon & Castello.	125 Canal street.	Card board cases.	3	4		See No. 114.
116	C. H. Frank.	411-413 East First street.	Carbonated waters.	4			
117	C. N. Smith.	411-413	Flour mill work.	3			
118	Lewis & Co.	331	Saws.	3			
119	J. P. Wolf.	34-36 Canal street.	Tobacco handler.	10			See No. 119.
120	Union Collar and Net Co.	322 East First street.	Horse collars, etc.	18	23	17	" 120.
121	J. H. Wilde.	30 Race street.	Woolen yarns, etc.	4			" 121.
122	R. M. Cranoble & Co.	415 East First street.	Overalls and shirts.	4	60	5	" 122.
123	Geo. J. Roberts & Co.	415 East First street.	Furniture.	16			" 123.
124	H. R. Farrott & Co.	St. Clair and First streets.	Hydraulic and steam pumps.	30		6	" 124.
125	Boehm & Ripper.	408-407 East First street.	Job machine work.	4			
126	Wise, Shetler & Co.	First and Madison streets.	Cotton batting.	22	8	26	See No. 126.
127	E. H. Brownell & Co.	321-325 Taylor street.	Boiler works, etc.	60		3	" 127.
128	Finney & Daniels.	North Webster street.	Carriage wheels, etc.	90		7	" 128.
129	Gem City Store Co.	Monument avenue.	Stoves, etc.	30		1	" 129.
130	Are. John B. Hogler.	409	Lumber.	30			" 130.
131	C. F. Snyder.	333 Taylor street.	Extension tables.	20		15	" 131.
132	W. P. Lewis.	Sears and Monument avenue.	Paper.	12	8		" 132.
133	John Stengel & Co.	427-437 East First street.	Furniture.	60		12	" 133.
134	C. Wight & Son.		Builders' wood-work.	60		2	" 134.
135	The Brownell & Co.		Engines, etc.	188			" 135.

186	The Parrott Manufacturing Co.	Upper Hydraulic	Plows	26				See No. 138.
187	The Anglie Plow Co.	122 North Front street	Brown paper	15	1	4		" 139.
188	E. J. Diem	Front and Crane streets	White lead and colors	30				" 140.
189	Joeliah Gebhart & Co.	Second and Front streets	Plows	20				" 158.
190	The Dayton Plow Co.	14 Front street	Screws	60	75	10		" 159.
191	The Dayton Screw Co.	Ottawa street	White paper	60	40	3		" 160.
192	The Mead Paper Co.	First and Front streets	Agricultural implements	80				" 161.
193	D. E. Mesberry & Co.	1128 East Third street	Car furnishing goods	120	5	44		" 162.
194	The Dayton Manufacturing Co.	2240	Trunk material (wood)	33				" 163.
195	E. B. Lyon	426 East Huffman avenue	Railroad cars	1513	7	67		" 164.
196	Barney & Smith Manufacturing Co.	Keweenaw street and Monument avenue	Blank books, etc.	19	14	3		" 165.
197	The Trum Manufacturing Co.	40 North Main street	Builders' wood work	44		2		" 166.
198	John Rouzer & Co.	Head of Fourth street	Horse collars	32				
199	Dayton Leather and Collar Co.	29 East Second street	Cone pulley belt shifters	40				See No. 168.
200	Leland & Tiffany	102 Canal street	Ginger ale, etc.	6				" 169.
201	The Sachs-Pruden Ale Co.	Fourth and Wyandot streets	Lasts, pegs, etc.	41				" 170.
202	Crawford and Wyandot streets	Shawnee street	Clear and packing boxes	11	5	6		" 171.
203	Adam Zengel	19 East Second street	Candy	8	8	1		" 172.
204	Bright & Fenner	East Library street	Loops and cruppers	18	3	6		
205	Dayton Loop and Crupper Co.	"	Bolt and screw cases	7				
206	W. R. Baker	"	Cash registers	71	5			See No. 174.
207	National Cash Registry Co.	"	Ginger ale, etc.	4				" 175.
208	The Holden Book Cover Co.	"	Book covers, etc.	4	20			" 176.
209	H. E. Mead & Co.	"	Printing, etc.	7				" 177.
210	John Dadds	Second street and Dale avenue	Sulky hay-rakes	90				" 178.
211	Dayton Malleable Iron Co.	West Third street	Malleable iron castings	250				" 179.
212	E. Conby	15-17 East Second street	Baking powder, etc.	10	15			
213	M. A. Simmonds	Dayton View	Machine knives	22				
214	S. C. Bennett & Co.	26-28 East First street	Furniture	40	1			See No. 181.
215	The C. L. Hase Co.	Forest avenue	Upholstering water wheels, etc.	250	2			" 182.
216	S. N. Brown & Co.	119 East Fifth street	Stray and blinders' boards	6				
217	Hanna Brothers	North Dayton	Pumps and oil machinery	100	15			See No. 184.
218	F. Appel	Keweenaw street	Carriage wheels, etc.	166				
219	J. G. Doren	Fourth and St. Clair streets	Upholstering	21	66			See No. 186.
220	The Volks-Zeltung	122-125 Fifth street	Upholstering	6				" 187.
221	A. Brech	308	Upholstering	5	14			" 188.
222	The Brownell & Co.	310-312 Fifth street	Upholstering	7	8			" 189.
223	Terry & Shroyer Tobacco Co.	East Dayton	Printing	10				" 190.
224	The Bryce Furnace Co.	Fourth and St. Clair streets	Tin and sheet-iron work	108				See No. 192.
225	Robert Barnes	Third street and canal	Steam boilers	90	6	1		" 194.
226	B. L. Bates & Bro.	"	Furnaces	25				
227	Charles Winchel	"	Cigar boxes	2	2	1		See No. 196.
228	Mull & Underwood	Third and St. Clair streets	Machine job work	10				
229	Johnson & Reynolds	142 East St. Clair street	Cornice, etc.	25				
230	Monitor Publishing Co.	131-133	Candy	6				See No. 199.
231	The Groneweg Printing Co.	Second and Jefferson streets	Blank books, etc.	10	15			" 200.
232	Turner & Knerr	36 North Jefferson street	Printing	25	50			" 201.
233	The Herald Publishing Co.	Second and Jefferson streets	Newspaper printing	17	1	1		
234	Cotterill, Fenner & Co.	119-117 East Second street	Job printing, etc.	21	4	5		
235			Laundrying	4	23			
236			Daily newspaper	22				See No. 206.
237			Tobacco	5	40			" 206.

DAYTON—Continued.

Number.	Name of firm.	Location.	Goods manufactured.	Employees.		For "Changes Ordered," see numerical arrangement following Third District.
				Males.	Females.	
207	G. W. Heathman & Co.	Second and St. Clair streets.	Crackers, etc.	19	1	See No. 207.
208	John Klee & Son.	First street and canal.	Ginger ale, etc.	7	.....	.....
209	Beaver & Co.	26-32 Sears street.	Soap.	8	.....	See No. 209.
210	Adam Eckhart.	307 East First street.	Brooms.	8	2	.....
211	J. W. Johnson.	44 North Jefferson street.	Job printing.	10	3	See No. 211.
212	G. Weipert.	837 Germantown street.	Beer kegs, etc.	12	.....	.....
213	A. L. Bauman & Bro.	439-441 West Third street.	Crackers, etc.	27	4	See No. 213.
214	J. L. Baker.	26 West Fifth street.	Carriages.	35	.....	.....
215	L. & M. Woodhull.	West Fifth street.	"	95	.....	.....
216	The Columbia Bridge Co.	Louis street and railroad.	Iron bridges.	60	.....	See No. 216.

MIAMISBURG.

252	Miamisburg Binder Twine and Cordage Co.	.....	Binder twine and cordage.	100	75	30	See No. 252.
253	Hoover & Gamble.	.....	Agricultural implements.	175	.....	10	" 253.
254	Bookwalter Brothers & Co.	.....	Carriage wheels, etc.	45	.....	1	" 254.
255	D. Grobe.	.....	Builders' wood-work.	8	.....	.....	.....
256	Miami Valley Paper Co.	.....	Paper.	25	17	.....	See No. 256.
257	The Ohio Paper Co.	.....	"	30	14	.....	.....
258	The Ohio Paper Co.	.....	Pulp.	10	.....	.....	.....
259	A. Kuehn.	.....	Lager beer.	4	.....	.....	.....
260	The Kauffman Buggy Co.	.....	Carriages, etc.	4	.....	3	See No. 260.

VAN WERT COUNTY.

DELPHOS.

978	Delphos Union Slave Co.	Near P. Ft. W. & C. R. R.	Staves and headings.	35	.....	3	.....
979	Ohio Wheel Co.	West Canal street.	Wheel material.	65	.....	.....	See No. 979.
980	Miller & Morton.	.....	Flour, meal, etc.	6	.....	.....	.....
981	Hartwell Brothers.	.....	Handles, etc.	18	.....	.....	.....
982	Jacob Schafer.	Near P. Ft. W. & C. R. R.	Lumber, etc.	4	.....	4	See No. 982.
983	Delphos Woollen Mills.	West Canal street.	Blankets, etc.	4	3	3	.....

VAN WEERT.

984	Eagle Stave Co.....	Near P., Ft. W. & C. R. R.....	Staves and heading.....	70	8	.....
985	H. Butler & Co.....	Wall and Center streets.....	".....	28	.....	.....
986	Oil Well Supply Co.....	North Wall street.....	Sucker rods, etc.....	20	.....	.....
987	J. A. Gleason & Brother.....	Wall street.....	Wagon wood-work, etc.....	8	.....	See No. 987.
988	A. & F. Gleason.....	Sannon street.....	Building material.....	14	.....	" 988.
989	People's Milling Association.....	South Washington street.....	Flour, etc.....	6	.....	" 989.
990	D. Spangler.....	Water street.....	Building material.....	5	.....	" 990.
991	Rupright Brothers.....	South Walnut street.....	Drain tile.....	6	.....	.....
992	Van Weert Foundry and Machine Works.....	Near Wall street.....	Foundry work, etc.....	16	.....	.....
993	L. F. Ross.....	South Walnut street.....	Drain tile.....	5	.....	.....
994	Union Mills Flouring Co.....	South Walnut street.....	Flour, etc.....	5	.....	See No. 994.
995	W. A. Clark.....	West Jackson street.....	".....	4	.....	" 995.

WARREN COUNTY.

FRANKLIN.

277	Buehner & Duffy.....	Anderson street.....	Job machinery.....	6	.....	.....
278	The Eagle Paper Co.....	South of Franklin.....	Wood pulp.....	10	.....	.....
279	The Harding Paper Co.....	C. C. & I. R. R., near Jackson street.....	Reg sorting, etc.....	10	70	See No. 279.
280	The Harding Paper Co.....	North Front street.....	Writing papers.....	56	40	" 280.
281	J. S. Van Horn.....	Jackson street.....	Builders' Wood-Work.....	10	2	.....
282	Rantzahn and Brother.....	.....	Flour.....	4	.....	See No. 282.
283	The Friend and Forgy Paper Co.....	North Front street.....	Paper.....	55	3	" 283.
284	The Franklin Paper Co.....	South of Franklin.....	Wood pulp.....	10	.....	" 284.
285	The Franklin Paper Co.....	Sixth street.....	Paper.....	50	20	" 285.
286	The Perrine Paper Co.....	.....	".....	10	3	" 286.
287	The Eagle Paper Co.....	.....	".....	50	25	" 287.

Detailed Statement

OF CHANGES ORDERED IN THIRD DISTRICT.

- No. 1.—Ibold Brothers. Post minors' notices; keep shop clean; put ventilator through the roof.
- No. 2.—Bering & Co. Place guard in front of shafting of single machine bench. Complied.
- No. 3.—The Ireland Manufacturing Co. Comply with minors' law; provide exhaust-fan for carrying away dust in polishing room.
- No. 4.—Sechler & Co. Post minors' notices; guard fly-wheel and belt of engine, also fly-wheel of tire-punch.
- No. 5.—J. H. Lucke & Co. Keep record of minors. Complied.
- No. 6.—The Cincinnati Planing Mill Co. Box in belt running through the floor; guard fly-wheel; provide guard for circular rip-saw.
- No. 7.—The Star Box Co. Provide guard for circular rip-saw.
- No. 8.—The Geise Lumber Co. Comply with law in reference to minors.
- No. 9.—A. Morrison & Co. Provide guards for saws.
- No. 10.—J. R. Mitchell & Co. Comply with law in reference to minors. Complied. Provide exhaust-fan for carrying away dust.
- No. 11.—A. J. Doescher. Comply with law in reference to minors; guard fly-wheel and belt, also elevator openings; connect fire-escape with upper story.
- No. 12.—The Brockman Pottery Co. Comply with law in reference to minors.
- No. 13.—The Continental Cabinet Co. Provide additional means for egress from third story; box in main belt running through the floor; keep record of minors employed.
- No. 14.—Wrigley Brothers. Comply with law in relation to minors; box in belt running through the floor near elevator; have cover over coupling of shaft made permanent. Complied.
- No. 15.—Hiram W. Davis & Co. Comply with law in reference to minors; box in belts running through the floor of wood-working room, brick building; use guards on circular rip-saw; guard swing-saw so that, in case pull-back should break, it will not fly out beyond table; place guard in front of fly-wheel of machine for putting bands on hubs, wheel department.
- No. 16.—Baer, Levi & Co. Guard fly-wheel, pulley and belt of engine; comply with law in reference to minors.
- No. 17.—Krohn, Feiss & Co. Comply with law in reference to minors. Complied.
- No. 18.—H. Tietig & Brother. Comply with law in reference to keeping record of minors employed.
- No. 19.—Sebastian, May & Co. Post minors' notices.
- No. 20.—The Brunswick, Balke & Collender Co. Cover horizontal pulley, third floor; guard back part of fly-wheel of engine.
- No. 23.—R. H. Crane. Comply with law in relation to record of minors, etc. Complied.
- No. 29.—James E. Winterfeldt. Comply with law in reference to minors employed.

- No. 30.—Haas Brothers. Comply with law in reference to minors.
- No. 31.—Ditchen, Zinsle & Co. Provide additional means for egress by erecting outside balcony incline-ladder fire-escape on front of building; additional water-closet accommodations; have railings placed on stairways; comply with law in relation to minors.
- No. 32.—Charles Kaiper. Provide additional means for egress; comply with law in reference to minors.
- No. 33.—Henry Bade & Son. Provide additional means for egress; have hoist openings kept closed when not in use.
- No. 34.—John Baillie's Son. Provide additional means for egress.
- No. 35.—The Cincinnati Screw and Tap Co. Provide additional means for egress.
- No. 36.—The O'Neal & Price Co. Provide additional means for egress.
- No. 39.—The Front Street Furniture Co. Provide guard for saw.
- No. 40.—Doscher Brothers. Provide additional means for egress by erecting an outside fire-escape; comply with law in relation to minors.
- No. 41.—H. Korf, Jr. Provide additional means for egress.
- No. 42.—M. Spiekerman. Floor of wash-room being very wet from leakage of pipes, firm was advised to lay slate floor, and until this could be accomplished, keep saw-dust on floor to prevent employees from slipping.
- No. 44.—The American Laundry Co. Provide additional means for egress; have elevator openings so guarded as to be inclosed when elevator is away from floor; guard belts of centrifugal wringers.
- No. 45.—L. Newburger & Brother. Provide balcony and ladder for fifth story, and connect same with fire-escape at fourth story; self-closing devices for elevator openings, and put bars in working order; comply with law in reference to minors.
- No. 46.—A. Renesch & Co. Compel employees to use guard on circular rip-saw; have swing-saw counter-balanced, or a guard to prevent same from flying beyond table in case pull-back should break, also guard or box back of same; have elevator openings kept closed when elevator is away from floor.
- No. 47.—John R. Wheaton. Post minors' notices.
- No. 48.—The Cincinnati Screw and Tap Co. Provide additional means for egress.
- No. 49.—Puttman & Robers. Use hand-guards on circular rip-saws; provide guard for swing-saw, to prevent same from flying out in case pull-back should break, or have counter-balance in place of pull-back; guard side of band-saw in saw-mill; comply with law relative to minors.
- No. 50.—I. W. Sutphin. Former changes ordered, in reference to additional egress, has been complied with. Additional changes: Provide railing for stairway from third floor.
- No. 51.—The Parker Carriage Goods Co. Provide additional means for egress; comply with law relative to minors.
- No. 52.—Streiff & Rothkopf. Comply with law relative to minors.
- No. 53.—Fritz Brothers. Comply with law relative to minors; provide additional water-closet for female employees. Complied.
- No. 55.—Joseph Shaefer. Post minors' notices, and provide record of minors employed.
- No. 56.—Uhlman & Bloom. Post minors' notices, and provide record of minors employed.
- No. 57.—Shaefer & Mahrt. Post minors' notices; keep record of minors employed in obedience to provisions of law.

- No. 58.—C. Wight & Son. Provide additional means for egress—fire-escape on front of building, or an opening so as to reach the roof of two-story part of building in rear; hand-guard for circular rip-saw; have fly-wheel and main belt of engine guarded; comply with law in relation to minors; have elevator opening so guarded as to be enclosed whenever elevator is away from floors.
- No. 59.—H. Keck & Co. Provide additional means for egress.
- No. 60.—Duhme & Co. Comply with law in relation to minors; have water-tank cleaned.
- No. 61.—Fox Brothers & Co. Comply with law relative to employment of minors.
- No. 62.—The John Holland Gold Pen Co. Comply with law relative to minors.
- No. 63.—Schrimer & Stock. Comply with law relative to minors; provide guard for circular rip-saw.
- No. 64.—Harry Pollitz. Comply with law in reference to minors; guard shafting under bench by nailing board to bench about two feet from floor.
- No. 65.—George Uchtman & Brother. Comply with law in relation to minors; provide guard for circular rip-saw; box in belt running through second floor.
- No. 66.—Frank Unnewehr & Co. Comply with law relative to minors.
- No. 67.—The C. Jacobs Cordage Co. Comply with law regulating the employment of minors; fencing or casing along main belt.
- No. 68.—The Cincinnati Wire Co. Comply with the law regulating the employment of minors.
- No. 69.—C. Behlen. Additional means for egress, provided an increase in the number employed is made.
- No. 70.—The James & Mayers Buggy Co. Place banisters on stairway, and railing around head of same in front building; keep stairway in condition so as to be available in case of fire in wing building; guard shafting and set-screw running sewing-machine, also shafting in basement of blacksmith shop.
- No. 71.—Geo. H. Bonte & Co. Former changes, in reference to fire-escape and exhaust for breakers, have been complied with. Comply with law relative to the employment of minors.
- No. 72.—Lewis & Loper. Guard cog-wheel gearing and shafting running large rope machine in basement; guard end pulleys and gearing of jennies, first and second row, first floor, and in back room, also those on second floor; guard cog-wheel gearing of Goode drawing machines with caps or cases, also back of pitman of engine; comply with minors' law.
- No. 73.—Walter L. Haldy & Co. Comply with law in relation to employment of minors.
- No. 75.—H. H. Wiggers. To have fly-wheel of engine guarded, also guard along belt and pulley back of engine; provide safety device for elevator in warehouse and finishing department, and allow no person to ride on same until put in safe condition.
- No. 76.—Moses Glas. Comply with law in relation to record of minors.
- No. 77.—The Merchants' Tobacco Co. Comply with law relative to minors.
- No. 78.—M. J. Houck & Co. Comply with law relative to minors; place railing at head of stairway next to door.
- No. 80.—Hewitt Brothers. Repair floor near kettle. Complied with. Comply with law relative to minors.
- No. 81.—The Christian Publishing Association. Provide better guards for elevator openings.
- No. 83.—W. P. Callahan & Co. Provide guard front of fly-wheel back of engine bed.
- No. 84.—T. P. Long. Comply with law in relation to keeping record of minors employed.

- No. 85.—The Stoddard Manufacturing Co. Guard fly-wheel and main belt at foot of steps back of engine, extending same back to frame-work; guard elevators so as to be enclosed whenever same are away from floors; keep record of minors under eighteen years of age; guard swing-saw, to prevent flying, with counter-balance; provide exhaust for emery-wheels.
- No. 86.—Kratowill Milling Co. Case in upright shaft in rear of mill, first and third floor; cover belt and horizontal pulley, near stairway on upper floor, front mill.
- No. 88.—Pierce & Coleman. Provide record of persons under eighteen years of age.
- No. 89.—The Ohio Rake Co. Provide guard for circular saw used in sawing short material; provide additional guards for elevator openings, so as to enclose same when elevator is above floors.
- No. 90.—Zwick, Greenwald & Co. Provide record of minors employed under eighteen years of age; hand-guard for circular rip-saw in back shop; have swing-saw in front shop counter-balanced to prevent same flying out in case rope should break; box in belt running through third floor.
- No. 91.—The Farmers' Friend Manufacturing Co. Comply with law in reference to keeping record of minors employed; have elevator openings so guarded as to be enclosed when elevators are away from the floors.
- No. 92.—The Crune & Sefton Manufacturing Co. Keep record of minors employed.
- No. 93.—Broadup & Co. Guard fly-wheel; place railing around head of stairway. Complied.
- No. 94.—Boyer & McMaster. Reduce speed of emery-wheel to 1250 revolutions per minute.
- No. 96.—The Famous Laundry. Guard cog-wheel gearing of collar ironer. Former orders, in reference to casing in shafting, have been complied with.
- No. 97.—McHose & Lyons. Case in belt running through second floor near stairway; place guard across doorway in front of fly-wheel; keep record of persons under eighteen years of age.
- No. 98.—Joseph Shaefer. Keep record of persons employed under eighteen years of age.
- No. 99.—Schaefer & Mahrt. Keep record of persons employed under eighteen years of age—complied with; additional window in packing-room as a means of escape to roof of two-story building, in case of fire.
- No. 100.—Bloom, Gerwels & Co. Comply with law in reference to employment of minors.
- No. 101.—Hoffritz & Keyer. Keep record of minors employed; place self-closing trap doors at hoist openings.
- No. 102.—W. W. White. Comply with law in reference to minors.
- No. 106.—U. B. Publishing House. Keep record of persons under eighteen years of age; place guard at back part of fly-wheel.
- No. 107.—The Buckeye Iron and Brass Works. Keep record of persons employed under eighteen years of age; guard elevator opening on second floor.
- No. 108.—Miller Brothers. Keep record of persons employed under the age of eighteen years.
- No. 109.—Thomas Nixon & Co. Keep a record of persons employed under eighteen years of age; provide self-closing gates for elevator.
- No. 111.—Laubach & Iddings. Keep a record of all persons employed under the age of eighteen years. Former changes ordered, in reference to railing on outside of bridge, have been complied with.
- No. 112.—Shaefer & Co. Keep record of all persons employed under eighteen years of age; place railing at head of stair-way.

- No. 113.—G. Stomps & Co. Keep record of minors. Complied with. Box in belt running tenon machine.
- No. 115.—Nixon & Costello. Keep record of persons employed under the age of eighteen years.
- No. 119.—J. P. Wolf. Comply with law relative to minors.
- No. 120.—The Union Collar and Net Co. Guard back part of fly-wheel; have elevator opening kept closed when elevator is away from floor.
- No. 121.—J. H. Wilde. Provide shuttle guard at end of loom standing next to cross loom.
- No. 122.—R. M. Connoble & Co. Keep record of persons employed under eighteen years of age. Former changes ordered, fire-escape, has been complied with.
- No. 124.—H. R. Parrott. Keep record of all persons employed under eighteen years of age; place banisters on stairway, side next to elevator; use hand-guard on circular saw.
- No. 126.—Wise, Scheible & Co. Cover end of cog-wheel gearing of lappers; place guard in front of fly-wheel of engine, back of engine bed; keep record of persons employed under the age of eighteen years.
- No. 127.—E. H. Brownell & Co. Keep record of persons employed under the age of eighteen years.
- No. 128.—Pinneo & Daniels. Keep record of persons employed under the age of eighteen years; provide self-closing gates for elevator openings; have swing-saw for cutting off butts guarded either with a catch to prevent it flying out beyond the table, or use counter-balance; use guard for circular rip-saw.
- No. 129.—The Gem City Stove Co. Comply with law in reference to employment of minors.
- No. 130.—Mrs. John B. Hogler. Extend guard to fly-wheel and main belt; use guard for edging saw.
- No. 131.—C. F. Snyder. Keep record of all minors employed under eighteen years of age.
- No. 132.—W. P. Lewis. Guard cotton tub next to outside door.
- No. 133.—John Stengel & Co. Keep a record of persons employed under eighteen years of age; provide additional means of egress from four-story building; self-closing gates for elevator openings. Complied.
- No. 134.—C. Wight & Son. Keep record of all persons employed under the age of eighteen years; self-closing gates for elevator; provide hand-guards for circular rip-saw and shapers; additional means of egress from third story.
- No. 135.—Brownell & Co. Keep record of all persons employed under the age of eighteen years; reduce speed of 16-inch emery-wheel from 1560 revolutions per minute to 1350 revolutions; provide more substantial support for boxes overhead in shipping department. Complied.
- No. 138.—E. J. Diem. Keep record of persons employed under eighteen years of age; better guard to fly-wheel; guard belts running through floors; also belt and pulley on side next to beater, where men stand on waste-pipe.
- No. 139.—Josiah Gebhart & Co. Guard side of fly-wheel where engineer enters to oil bearings.
- No. 140.—The Dayton Plow Co. Guard elevator openings; provide exhaust or dust collectors for emery-wheels; additional egress from upper story used as paint-room.
- No. 141.—Stifel, Lockwood & Co. Guard hoist-opening on third floor. Complied.
- No. 143.—Standard Soap Co. Place banister on stairway, also guard around hoist-openings.
- No. 144.—W. C. Kennett. Former changes recommended have been complied with.

- No. 145.—The Anderson & Harris Carriage Co. Provide hand-guard for circular rip-saw; place guard over swing-saw, or have it counter-balanced in place of rope hold-back; also guard on shaper.
- No. 146.—Joseph B. Blettner. Guard fly-wheel of engine.
- No. 148.—Rudolph Suhre. Guard main belts in engine-room.
- No. 149.—Excelsior Cigar Mold Co. Comply with law in reference to minors.
- No. 151.—Kriger, Burkhardt & Co. Comply with law relative to the employment of minors.
- No. 152.—Keyer, Haug & Co. Provide guard for shaper, or do not permit employes to operate same without pattern; also provide guard for circular rip-saw.
- No. 153.—The Sullivan Printing Works. Comply with law relative to the employment of minors; place guard around front of fly-wheel of engine.
- No. 155.—Perkins & Campbell. Comply with law in reference to employment of minors.
- No. 156.—Richard Wooley's Sons. Comply with law relative to the employment of minors.
- No. 158.—The Dayton Screw Co. Keep record of persons employed under eighteen years of age.
- No. 159.—The Mead Paper Co. Provide means for carrying off dust from rag cutter in large mill.
- No. 160.—D. E. McSherry & Co. Keep record of persons employed under eighteen years of age; provide better guards for elevator openings.
- No. 161.—The Dayton Manufacturing Co. Keep outside water-closets in better sanitary condition.
- No. 162.—E. B. Lyon. Post minors' notices; keep record of persons employed under eighteen years of age; guard fly-wheel of engine.
- No. 163.—The Barney & Smith Manufacturing Co. Keep record of persons employed under the age of eighteen years; guard swing-saw in basement of wood shop so as to prevent it flying out beyond the table, or have same counter-balanced; guard large belt driving planer, near west door of two-story wood shop; self-closing guards to elevator openings.
- No. 164.—The Troup Manufacturing Co. Provide self-closing trap-doors or gates to elevator openings in hall-way, and particularly on the upper floor, near water-closet used by female employes; permit no person to ride on elevator until provided with safety-catch; comply with law relative to employment of minors.
- No. 165.—John Rouzer & Co. Guard elevator openings so as to be closed when elevator is away from floors; additional means of escape from upper floor, in case of fire; provide hand-guards for circular rip-saw; comply with law regulating the employment of minors.
- No. 166.—The Dayton Leather and Collar Co. Provide additional means of egress from four-story building; keep water-closets in better condition.
- No. 168.—The Sachs-Pruden Ale Co. Keep record of persons employed under age of eighteen years; guard elevator openings on second floor.
- No. 169.—Crawford, McGregor & Canby. Keep record of persons employed under age of eighteen years.
- No. 170.—Adam Zengel. Provide record of persons employed under the age of eighteen years; guard main belt of engine in box room, also fly-wheel of engine from partition to engine bed.
- No. 171.—Bright & Fenner. Comply with law relative to employment of minors.
- No. 172.—The Dayton Loop and Crupper Co. Keep record of persons employed under eighteen years of age.
- No. 174.—The National Cash Registry Co. Comply with law relative to employment of minors.

- No. 175.—The Holden Book Cover Co. Comply with law² relative to employment of minors.
- No. 176.—H. E. Mead & Co. Keep record of persons employed under the age of eighteen years.
- No. 177.—John Dodds. Case in or guard fly-wheel of engine, back of engine bed, near doorway to boiler room.
- No. 178.—The Dayton Malleable Iron Co. Comply with law relative to employment of minors; use disinfectant in water-closets.
- No. 179.—E. Canby. Provide additional means of egress by erecting outside fire-escape.
- No. 181.—M. Ohmer's Sons. Additional means of escape in case of fire.
- No. 182.—The Stillwell & Bierce Manufacturing Co. Properly guard elevator opening in two-story wood-working building.
- No. 184.—The C. L. Hawes Co. Place guard in front of back part of fly-wheels of both large engines, extending same to near eccentrics; replace guard next to partition on large engine of straw board mills; box in or place steps over shaft running binder board machines and shaft running beaters; keep record of all persons employed under eighteen years of age.
- No. 186.—S. N. Brown & Co. Former changes ordered, in reference to guarding fly-wheel, etc., have been complied with.
- No. 187.—Hanna Brothers. Keep record of all persons employed under the age of eighteen years.
- No. 188.—F. Cappel. Post minors' notices; keep record of all persons employed under age of eighteen years.
- No. 189.—A Cappel. Keep record of all persons employed under eighteen years of age.
- No. 190.—J. G. Doren. Keep record of all persons employed under eighteen years of age.
- No. 191.—The Volks-Zeitung. Former changes in reference to additional means of egress, have been complied with. Keep record of persons employed under eighteen years of age.
- No. 193.—The Brownell & Co. Former change ordered, in reference to keeping record of minors, has been complied with.
- No. 194.—The Terry & Shroyer Tobacco Co. Provide new cable for elevator, and use self-closing gates at openings of same.
- No. 196.—Robert Barnes. Keep record of persons employed under eighteen years of age.
- No. 199.—Mull & Underwood. Use self-closing guards at elevator openings.
- No. 200.—Johnson & Watson. Keep water-closet in better sanitary condition; do not allow waste material to collect under stairway.
- No. 201.—Reynolds & Reynolds. Keep record of persons employed under eighteen years of age; provide better guards for elevator openings.
- No. 205.—The Herald Publishing Co. Keep record of all persons employed under eighteen years of age. Former orders, in reference to minors' notices and record, have been complied with.
- No. 206.—Cotterill, Fenner & Co. Keep record of persons employed under eighteen years of age.
- No. 207.—G. W. Heathman & Co. Repair gate at elevator opening.
- No. 209.—Beaver & Co. Properly guard openings in floor; comply with law in relation to minors.
- No. 211.—J. W. Johnson. Provide ventilation for water-closet in order that bad odor arising therefrom may be carried from work-room; keep record of all persons employed under eighteen years of age.
- No. 213.—A. L. Bauman & Bro. Guard fly-wheel of roller. Former changes ordered, in reference to elevator, have been complied with.

- No. 216.—The Columbia Bridge Co. Former changes ordered, in reference to guarding belt at foot of stairway, have been complied with.
- No. 217.—The Egan Co. Comply with law relative to minors.
- No. 218.—The Flexible Wire Mat Co. Comply with law relative to minors.
- No. 219.—H. J. Morten & Co. Provide shifter for belt driving planer; also counter-balance swing-saw.
- No. 220.—The American Clay Bird Co. Comply with law relative to employment of minors.
- No. 221.—S. C. Tatum & Co. Post minors' notices; keep record of all persons employed under the age of eighteen years.
- No. 222.—The Favorite Carriage Co. Post minors' notices; keep record of persons employed under eighteen years of age.
- No. 223.—The Bloch Printing Co. Comply with law relative to employment of minors; ladder escape from east window to roof of lower building should be made secure and long enough to rest on roof, or a ladder should be provided and securely fastened to reach to roof; self-closing guards at elevator openings on each floor; place guard in front of pulley of engine, and also fly-wheel of same.
- No. 224.—Dormer & Marks. Comply with law relative to the employment of minors.
- No. 226.—Joseph Wachtel. Comply with law relative to employment of minors; place guard in front of fly-wheel of engine.
- No. 227.—Block & Pollak. Guard side of fly-wheel of shears, also fly-wheel of engine.
- No. 228.—Charles Taylor & Sons. Guard upright shaft running grinders, also fly-wheel of engine; comply with law in relation to employment of minors.
- No. 229.—Ratterman & Luth. Comply with law in relation to employment of minors.
- No. 232.—The Illinois Leather Co. Guard fly-wheel of engine around the front and back part, from partition to engine bed.
- No. 234.—John Rowell. Comply with law relative to employment of minors.
- No. 235.—American Press Association. Comply with law relative to employment of minors.
- No. 236.—Cohen & Co. Guard fly-wheel and pitman of engine next to passage-way.
- No. 237.—Spence Brothers & Co. Keep record of persons employed under the age of eighteen years.
- No. 238.—The Cook Carriage Co. Reduce speed of emery-wheel to 1220 revolutions per minute; guard back of fly-wheel of engine; comply with law relative to employment of minors.
- No. 239.—Grossmann, Gouvion & Co. Comply with law relative to the employment of minors; repair trap-door on third floor; have hoist openings on fourth floor enclosed; provide additional means of escape by putting up outside fire-escape on rear of building; water-closet should be enclosed and have ventilation to roof to carry off bad odor.
- No. 240.—H. D. Smith & Co. Comply with law relative to employment of minors; provide additional means of escape from three-story back building—escape should be erected on south side of building, near east end, at second window; use self-closing trap-door to hoist-opening in same building.
- No. 241.—The Linwood Furniture Co. Comply with law relative to employment of minors; use hand-guard on circular rip-saw.
- No. 242.—The Ferris Hame Co. Guard fly-wheel of engine; also elevator opening near door of sanding-room; comply with law relative to employment of minors.

- No. 243.—Grossman, Gouvion & Co. Comply with law relative to the employment of minors.
- No. 244.—The L. Schreiber Sons' Co. Guard fly-wheel of engine; also all exposed fly-wheels and gearing.
- No. 245.—George Scott. Comply with law relative to employment of minors.
- No. 246.—P. Lanser. Use guard on circular rip-saw.
- No. 247.—The Diehl Fire Works Co. Comply with law in relation to employment of minors.
- No. 248.—The Sterns & Foster Co. Keep record of all persons employed under age of eighteen years; make guards to elevator opening self-closing. Former changes ordered, in reference to minors' notices and machinery, have been complied with.
- No. 249.—The Lockland Lumber Co. Keep record of all persons employed under eighteen years of age; counter-balance swing-saw.
- No. 250.—The Sol. Langdon & Sons' Co. Place railing on stairway.
- No. 251.—Geo. H. Bonte. Guard fly-wheel of engine; provide means for transmitting dust from carders; comply with law relative to employment of minors.
- No. 252.—The Miamisburg Binder Twine and Cordage Co. Keep record of all persons employed who are under eighteen years of age; comply with minors' law relative to the number of hours per day, etc.; guard gearing of breaker No. 55.
- No. 253.—Hoover & Gamble. Erect outside fire-escape on three-story building; guard fly-wheel of engine; post minors' notices and keep record of all persons employed under the age of eighteen years; provide self-closing gates to elevator openings, both sides, in three-story building.
- No. 254.—The Bookwalter Brothers Co. Use hand-guard on circular rip-saw; counter-balance swing-saw.
- No. 256.—The Miami Valley Paper Co. Guard fly-wheel of engine running paper-machine.
- No. 260.—The Kauffman Buggy Co. Keep record of persons employed under the age of eighteen.
- No. 261.—The Wilson & McCallay Tobacco Co. Provide self-closing gates to elevator openings.
- No. 262.—Wm. Caldwell. Place guard around fly-wheel of engine; use hand-guards on circular rip-saw; comply with minors' law.
- No. 263.—The Wrenn Paper Co. Place guard on side of platform next to gearing, where employe passes over to oil machinery.
- No. 266.—R. E. Johnson & Co. To keep record of minors employed.
- No. 267.—The Card Fabrique Co. Keep record of all persons employed under age of eighteen years.
- No. 268.—The Middletown Twine Co. Place guard around fly-wheel of engine; comply with law relative to the employment of minors.
- No. 270.—The Wardlow Thomas Paper Co. Guard shafting at foot of stairway to stock room from beater room; keep record of all persons employed under age of eighteen years.
- No. 271.—The Middletown Paper Co. Keep record of minors employed under age of eighteen years; post minors' notices; place guard along side of pitman of engine.
- No. 272.—The Gardner Paper Co. Provide means for better ventilation in cutter room, in order that dust may be carried out.
- No. 273.—The W. B. Oglesby Paper Co. Provide better ventilation in cutter room, in order to clear room of dust.

- No. 274.—The Tytus Paper Co. Guard main pulley and belt running Jordan in north mill, and shaft running screen, where employes pass over it; also cog gearing of wet machine in south mill; provide means for getting clear of dust arising from stock cutter.
- No. 275.—The Middletown Pump Co. Keep record of all persons employed under age of eighteen years.
- No. 276.—The P. J. Sorg Co. Keep record of persons employed under the age of eighteen years.
- No. 279.—The Harding Paper Co. Guard elevator opening so as to be closed when elevator is away from floor; box in belt running through floor and driving fan; guard shafting at south end of room near cutter.
- No. 280.—The Harding Paper Co. Guard fly-wheel and belt of engine in basement; have elevator openings so guarded as to be enclosed when elevators are away from the floors.
- No. 282.—Rautzan & Bro. Guard stairway by placing banister thereon.
- No. 283.—The Friend & Forgy Paper Co. Guard belts running beaters in old beater room; guard fly-wheels of both paper machine engines, back of engine bed.
- No. 284.—The Franklin Paper Co. Guard fly-wheel of engine.
- No. 285.—The Franklin Paper Co. Guard shafting where employes pass under them, in paper machine room, near screen, and from beater room, south end.
- No. 286.—The Perrine Paper Co. Guard cog-wheel gearing running inward on main shaft of paper machine, back of pulley of No. 3 beater; also main shaft running beaters, where employes pass under same.
- No. 287.—The Eagle Paper Co. Place casing on each side of fly-wheel of engine running paper machine in front room (large machine); also, guard around pulley of Jordan engine; set-screws on collar of shaft in beater engine room should be guarded.
- No. 288.—The Piqua Straw Board Co. Comply with law in reference to the employment of minors; provide means for carrying away dust from cutter.
- No. 290.—I. J. Whitlock. Provide hand-guard for circular rip-saw.
- No. 291.—C. A. & C. L. Wood. Provide guard for circular saw.
- No. 292.—The Fritsche Brothers. Former changes ordered, to counter-balance swing-saw, have been complied with.
- No. 293.—The Wood Linseed Oil Co. Guard elevator openings.
- No. 294.—The Piqua Manufacturing Co. Post minors' notices.
- No. 296.—The Piqua Handle Co. Box in main belt running through second floor; have elevator openings so guarded as to be enclosed when elevator is away from floors; have guard to fly-wheel of engine made higher, and extend same around front of wheel to shaft-bed; comply with law in relation to employment of minors. Complied.
- No. 297.—The Piqua Straw Board Co. Post minors' notices; guard fly-wheels of engines in north engine room, near doorway to lower beater room, and two engines in south engine room; guard along belt running beaters in north beater room; cover main shaft in same room where employes step over shaft; cover shaft over pump box.
- No. 298.—The Piqua Oat Meal Co. Guard fly-wheel of engine.
- No. 299.—Snyder & Son. Provide shifters for belts requiring them; have elevator opening on second floor of stockroom guarded; extend guard to main belt in engine room back to partition.
- No. 300.—C. F. Rankin & Co. Guard fly-wheel and upright shafting.

- No. 305.—The Piqua Hosiery Co. Guard stairway by placing banisters thereon; post minors' notices and comply with law governing the employment of minors.
- No. 306.—The F. Gray Co. Former recommendations, in reference to minors and machinery, have been complied with.
- No. 307.—L. C. and W. L. Cron & Co. Provide guards for circular rip-saw; keep record of persons employed under age of eighteen years.
- No. 308.—Cron, Kills & Co. Provide guard for saw; keep record of persons employed under age of eighteen years.
- No. 309.—The Troy Spring Wagon and Wheel Works. Provide safety catch for elevator in main building, and self-closing guards; also, elevator openings in three-story building should be so guarded as to be enclosed when elevator is away from floor; provide guard for circular rip-saw; keep record of persons employed under eighteen years of age.
- No. 310.—The Troy Buggy Works. Guard band-saw; guard elevator openings so as to be enclosed when elevators are away from floors; keep record of persons employed under the age of eighteen years.
- No. 311.—Kelly & Sons. Provide self-closing trap-doors for elevator openings.
- No. 312.—John & Wm. Youtsy. Have swing-saw counter-balanced instead of rope pull-back; use guard on circular rip-saw.
- No. 313.—The Hauss Electric Manufacturing Co. Case in belts running through the floors; comply with law relative to employment of minors.
- No. 314.—Langenbrunner & Co. Comply with law relative to the employment of minors.
- No. 315.—John P. Hoeb & Co. Comply with law relative to employment of minors.
- No. 317.—Dormer Brothers. Comply with law relative to the employment of minors.
- No. 318.—F. W. Freeman. Comply with the law relative to the employment of minors; provide additional means of egress.
- No. 319.—The P. J. Marqua Manufacturing Co. Keep record of persons employed under eighteen years of age; provide hand-guard for circular rip-saw; have guards of fly-wheel made fast to floor.
- No. 320.—J. Rosenthal & Co. Keep record of persons employed under the age of eighteen years; fire-escape must be fastened through the walls.
- No. 321.—L. Newburger & Brother. Keep record of persons employed under eighteen years of age; have fire-escape erected from fifth floor; self-closing gates at elevator opening on third floor.
- No. 322.—The Standard Wagon Co. Keep a record of persons employed under the age of eighteen years.
- No. 323.—The Standard Wheel Co. Keep record of persons employed under the age of eighteen years.
- No. 324.—The Golden Eagle Buggy Co. Keep record of persons employed under eighteen years of age.
- No. 325.—H. Miller. Keep record of persons employed under the age of eighteen years.
- No. 327.—George Deubel & Co. Have ladder leading to hatchway made stationary.
- No. 328.—Jacob Winkler & Co. Provide ventilator in sky-light.
- No. 329.—Fred. Davenport. Comply with law relative to employment of minors.
- No. 330.—Clemens Toenjes. Secure ladder to hatchway, in building No. 18, Reynolds street, so that it will remain permanently in its place.
- No. 331.—F. Lunkenheimer. Keep record of persons employed under the age of eighteen years; guard main belt from partition to pulley of engine—side next to engine.
- No. 333.—John H. Michael & Co. Comply with law relative to employment of minors.

- No. 334.—The Frey Printing Co. Comply with law relative to posting minors' notices; and keeping record.
- No. 335.—The Robert Mitchell Furniture Co. Comply with law relative to the employment of minors.
- No. 336.—The Cincinnati Safe and Lock Co. Place fencing along back part of fly-wheel of engine; provide self-closing gates to elevator openings; box in belts running through the floors.
- No. 337.—The Friend & Fox Paper Co. Guard belt running beaters, where not fenced, and belt running Jordan in paper machine room; also fly-wheels of all three engines.
- No. 338.—The Geo. H. Friend Paper Co. Guard main belt running paper machine, near passage from paper machine room to engine room; guard belt running large beater; comply with law relative to the employment of minors.
- No. 339.—J. H. Tangeman & Co. Place fencing along side of all belts running beaters—sides next to beaters; place guard in front of beater pulley, near passage-way, repaired; provide means for carrying away dust from rag cutters.
- No. 340.—The Haldeman Paper Co. Repair floor; provide means for carrying off dust from cutters.
- No. 341.—The Haldeman Paper Co. Provide means for carrying dust from rag cutter.
- No. 342.—The George Fox Starch Co. Keep record of persons employed under the age of eighteen years.
- No. 343.—W. H. Stewart's Sons. Provide hand-guard for buzz-saw, and have same used.
- No. 345.—Jos. Scheid & Son. Box belting running through floor; also put in good condition bars to elevator openings.
- No. 349.—M. Droeisch. Post minors' notices.
- No. 350.—R. Rover. Safely guard elevator openings; post minors' notices.
- No. 353.—Herman Klein & Son. Keep record of all persons employed under eighteen years of age; post minors' notices.
- No. 354.—Geo. Vehr & Co. Safely guard elevator openings.
- No. 355.—Geo. W. Stark & Brothers. Place guard around fly-wheel.
- No. 356.—L. A. Strobel & Co. Box belting and machinery in cellar. Complied.
- No. 357.—A. Wiemann & Co. Safely guard elevator openings; post minors' notices.
- No. 360.—A. Morrison & Co. Box driving belt on second floor.
- No. 361.—Samuel W. Trost. Safely guard fly-wheel; box belting on three machines on second floor.
- No. 362.—Shannon Furniture Co. Box belting on sandpaper machine, second floor; place guard around fly-wheel in engine room.
- No. 369.—H. Rosenbaum & Co. Post minors' notices.
- No. 370.—Geo. D. Winchell Manufacturing Co. Safely guard fly-wheel.
- No. 375.—M. H. Marks. Put up balcony incline-ladder fire-escape from fifth story.
- No. 429.—The Meyer & Merkel Manufacturing Co. Post minors' notices; place guards around elevator openings on first floor.
- No. 437.—Spencer & Kraig. Post minors' notices. Complied.
- No. 444.—The P. Eckert Co. Post minors' notices. Complied.
- No. 449.—F. C. Deckebach & Sons. Post minors' notices. Complied.
- No. 450.—Betts Street Furniture Co. Post minors' notices. Complied.
- No. 451.—H. T. Kemper. Post minors' notices. Complied.
- No. 452.—Franklin Furniture Co. Post minors' notices. Complied.
- No. 453.—H. Rikoff & Co. Post minors' notices. Complied.
- No. 454.—Kleine & Daumeyer. Post minors' notices. Complied.

- No. 455.—M. & A. Isaacs. Post minors' notices. Complied.
- No. 460.—Wm. Becker & Co. Post minors' notices. Complied.
- No. 461.—Chas. Duwel & Co. Post minors' notices. Complied.
- No. 465.—Cincinnati Office, Store and Saloon Fixture Co. Post minors' notices. Complied.
- No. 471.—G. A. Gray & Co. Post minors' notices. Complied.
- No. 475.—Mohawk Knitting Co. Post minors' notices. Complied.
- No. 482.—E. R. Loughhead & Co. Post minors' notices. Complied.
- No. 483.—Cincinnati Coffin Co. Post minors' notices. Complied.
- No. 486.—Kreimer & Brother. Post minors' notices. Complied.
- No. 492.—B. Meyer. Post minors' notices. Complied.
- No. 493.—John Threm. Post minors' notices. Complied.
- No. 494.—August Peters. Post minors' notices. Complied.
- No. 495.—The A. J. English Co. Post minors' notices. Complied.
- No. 498.—Chas. W. Breneman & Co. Post minors' notices. Complied.
- No. 501.—Enquirer Job Printing Co. Post minors' notices. Complied.
- No. 505.—Cincinnati Lithographic Co. Post minors' notices. Complied.
- No. 506.—Carriage Wood-work Manufacturing Co. Post minors' notices. Complied.
- No. 507.—E. A. Conkling. Post minors' notices. Complied.
- No. 508.—Hunter Manufacturing Co. Post minors' notices. Complied.
- No. 515.—Steinman & Meyer Furniture Co. Post minors' notices. Complied.
- No. 519.—A. & W. Amlung. Post minors' notices. Complied.
- No. 521.—A. Davis, Sons & Co. Post minors' notices. Complied.
- No. 523.—Cincinnati Gas Meter Repair Shop. Post minors' notices. Complied.
- No. 524.—J. R. Monfort. Post minors' notices. Complied.
- No. 525.—Nelson & Co. Post minors' notices. Complied.
- No. 528.—L. D. Thompson. Post minors' notices. Complied.
- No. 529.—Mendel, Rosenberger & Co. Post minors' notices. Complied.
- No. 531.—F. M. Watkins & Co. Post minors' notices. Complied.
- No. 534.—Wrigley Brothers. Repair floors in building; box in belting on scoring machine, third floor.
- No. 535.—Perkins, Campbell & Co. Post minors' notices. Complied.
- No. 538.—A. Joseph Nurre. Post minors' notices. Complied.
- No. 544.—The Ohio Valley Press. Place guard at elevator openings; guard belting on third floor of east building.
- No. 545.—The Crain-Breed Manufacturing Co. Post minors' notices. Complied.
- No. 548.—Buschle & Wuest. Put bars at elevator openings in order; keep turning shop clean.
- No. 551.—Corrugated Elbow Co. Post minors' notices. Complied.
- No. 552.—Foulds & Co. Repair guards to elevator openings in each house.
- No. 553.—George Hecker. Post minors' notices; keep approach to fire-escape clear. Complied.
- No. 556.—D. Hagan & Son. Post minors' notices. Complied.
- No. 557.—Krebs Lithographing Co. Post minors' notices. Complied.
- No. 559.—Hennegan & Co. Post minors' notices. Complied.
- No. 560.—Morrisson & Corcoran. Post minors' notices. Complied.
- No. 563.—Stribley & Co. Post minors' notices. Complied.
- No. 572.—Samuel Williamson. Repair water-closet for use of employees.
- No. 573.—Cordesman Machine Co. Box belting and post minors' notices. Complied.

- No. 574.—Bourbon Copper and Brass Works. Post minors' notices. Complied.
- No. 581.—Sechler & Co. Post minors' notices. Complied.
- No. 583.—H. Kindt & Co. Post minors' notices. Complied.
- No. 584.—Standard Carriage Goods Co. Clean out water-closets and put water pipes in order; post minors' notices.
- No. 590.—The Muller Machine Tool Co. Post minors' notices. Complied.
- No. 604.—B. Daubenheger & Co. Clean out cellar and water-closets, and make proper water connections, in order that closets may be used.
- No. 605.—Onken & Vance. Post minors' notices. Complied.
- No. 606.—Way Publishing Co. Clean out cellar and water-closet, and make proper water connections, in order that closets may be used.
- No. 607.—Princess Knitting Mills. Post minors' notices. Complied.
- No. 608.—Joseph Wachtel. Erect balcony incline-ladder fire-escape on Central avenue side of building, northwest corner Third street and Central avenue.
- No. 622.—J. Dornette & Brother. Post minors' notices. Complied.
- No. 624.—Adler & Co. Post minors' notices. Complied.
- No. 626.—Eureka Mills. Post minors' notices. Complied.
- No. 627.—L. J. Miller. Post minors' notices. Complied.
- No. 628.—W. H. Schwenkmeyer. Post minors' notices. Complied.
- No. 629.—The Hauser, Brenner & Fath Co. Post minors' notices. Complied.
- No. 630.—Queen City Steam Laundry. Post minors' notices. Complied.
- No. 631.—Wm. G. Fisher. Post minors' notices. Complied.
- No. 634.—Chas. Barnes & Co. Post minors' notices. Complied.
- No. 636.—The Anchor Mustard Co. Post minors' notices. Complied.
- No. 639.—Phoenix Manufacturing Co. Post minors' notices. Complied.
- No. 640.—H. R. Droster & Co. Post minors' notices; box in large belt. Complied.
- No. 641.—H. Bade & Son. Post minors' notices. Complied.
- No. 643.—A. Hesselbrock & Co. Post minors' notices. Complied.
- No. 644.—Alex. Fries & Brothers. Post minors' notices. Complied.
- No. 645.—Hart, Meade & Co. Post minors' notices. Complied.
- No. 646.—The T. A. Snider Preserve Co. Post minors' notices. Complied.
- No. 647.—P. Sullivan & Co. Erect balcony incline-ladder fire-escape on east side of building. Complied.
- No. 649.—Mills, Spellmire & Co. Post minors' notices. Complied.
- No. 651.—B. Klinker & Co. Keep stairway approach clear at all times; post minors' notices. Complied.
- No. 652.—The Hill Electrical Works. Post minors' notices. Complied.
- No. 654.—The Pettibone Campaign Supply Co. Post minors' notices; keep windows adjacent to fire-escape clear of obstruction.
- No. 656.—The Strobbridge Lithographing Co. Post minors' notices. Complied.
- No. 657.—Jas. Murdock, Jr. Guard elevator openings; box in belting on each floor; guard fly-wheel and driving-belt in engine-room; post minors' notices.
- No. 661.—Jos. J. Mierenfeld. Post minors' notices. Complied.
- No. 662.—Western Methodist Book Concern. Post minors' notices. Complied.
- No. 663.—Keck & Co. Post minors' notices. Complied.
- No. 668.—Henry Verhage. Post minors' notices. Complied.
- No. 672.—Alex. Riegler. Post minors' notices. Complied.
- No. 673.—F. Lammers & Sons. Post minors' notices. Complied.
- No. 678.—L. G. Schaeffer & Co. Erect fire-escape on east side of building.

- No. 679.—Haas Brothers. Discharge minor (tobacco stripper) in your employ, under twelve years of age. Complied.
- No. 682.—E. J. Wilson & Co. Post minors' notices. Complied.
- No. 684.—Geo. P. Vicken. Post minors' notices. Complied.
- No. 685.—Mrs. Geo. Albert. Post minors' notices. Complied.
- No. 688.—Singer Sewing Machine Co. Post minors' notices. Complied.
- No. 690.—O. J. Shafer. Post minors' notices. Complied.
- No. 691.—The Globe Foundry. Post minors' notices. Complied.
- No. 692.—John Crowther. Post minors' notices. Complied.
- No. 693.—W. Osterlein. Post minors' notices. Complied.
- No. 694.—Easton & Clark. Post minors' notices. Complied.
- No. 702.—The Robinson Planing Mill Co. Provide guard for buzz-saw.
- No. 704.—Sam. W. Weidler. Post minors' notices. Complied.
- No. 705.—Central Furniture Association. Place guard around fly-wheel; provide guards for buzz-saws; guard all elevator openings; post minors' notices.
- No. 706.—John Dames. Post minors' notices and keep record of those employed under the age of eighteen years.
- No. 707.—Peter Marks. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 713.—Cross & Scherm. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 715.—Peerless Wringer Co. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 719.—Victor Knecht. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 720.—Phœnix Iron Foundry. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 721.—Mendel, Rosenberger & Co. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 723.—H. F. Pauly. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 724.—John C. Heidrich & Co. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 726.—J. Miller & Co. Repair bars at elevator openings; post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 727.—Dethless & Scharegge. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 731.—Theo. Wintering. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 733.—I. Greenfield. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 736.—Henry Nelson. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 739.—Hunt Street Furniture Co. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 740.—Cincinnati Shade Cloth and Window Shade Co. Post minors' notices. Complied.
- No. 741.—E. E. Evans & Co. Provide guards for rip-saws and wood-shapers; post minors' notices.
- No. 745.—Belmont & Overbecke. Provide guards for rip-saws and wood-shapers.

- No. 746.—Jas. Griffith & Sons. Provide guards for rip-saws and wood-shapers.
- No. 747.—Mrs. Augusta Myers. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 748.—Carstens Brothers. Post minors' notices. Complied.
- No. 751.—Louis J. Klopp. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 754.—A. J. Gunter. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 758.—L. Havekotte & Co. Post minors' notices. Complied.
- No. 759.—D. Rohan's Sons. Provide guards for saws; post minors' notices.
- No. 764.—Cincinnati Oak Leather Co. Place guard around fly-wheel in engine room.
- No. 775.—F. & C. Wuest. Post minors' notices. Complied.
- No. 776.—Union Omnibus and Wagon Co. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 777.—Philip Jung. Post minors' notices and keep record of those in your employ under the age of eighteen years.
- No. 779.—F. Leitemeyer. Post minors' notices. Complied.
- No. 780.—Fred. Heimas. Post notices and keep record of minors in your employ under the age of eighteen years.
- No. 781.—Joseph Foster. Post notices and keep record of minors in your employ under age of eighteen years.
- No. 782.—T. J. Orr & Co. Post notices and keep record of minors in your employ under eighteen years of age.
- No. 791.—Cook & Bankhardt. Post notices and keep record of minors in your employ under the age of eighteen years.
- No. 804.—J. & J. M. Johnston. Provide guards for saws.
- No. 811.—The Cincinnati Suspender Co. Former order, in reference to erecting fire-escape, has been complied with.
- No. 812.—Boake & Miller. Post notices. Complied.
- No. 813.—Jacob Winkler & Co. Former order, in reference to ventilation, has been complied with.
- No. 814.—Cincinnati Publishing Co. Post notices. Complied.
- No. 815.—The Western Cap and Knitting Co. Post notices. Complied.
- No. 817.—Chas. H. Fish. Post notices. Complied.
- No. 818.—A. C. Evans Manufacturing Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 820.—Springfield Manufacturing Co. Place railing or casing in front of fly-wheel of engine; provide guard for rip-saw.
- No. 821.—MacGregor Brothers & Co. Former changes ordered, in reference to machinery have been complied with.
- No. 832.—David Strock. Provide guard for rip-saw; put up casing in front of lower pulley of band-saw; provide belts necessary to be shifted with shifters.
- No. 838.—Springfield Coffin and Casket Co. Put up railing or casing in front of fly-wheel of engine; provide buzz-saws with guards.
- No. 839.—Springfield Engine and Thresher Co. Provide guards for buzz-saws; place hand-railing on open stairway.
- No. 845.—E. W. Ross & Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 848.—Robbins & Myers. Provide better ventilation in tumbler-room by the use of exhaust fan and pipes for tumblers to carry away the dust.

- No. 849.—Mast, Foos & Co. Provide guards for buzz-saws, also for band-saw above the table, and put up casing in front of lower pulley.
- No. 850.—Springfield Machine Tool Co. Provide bars or gates for all elevator openings.
- No. 852.—Mark A. Smith. Former recommendations made in reference to building have been complied with.
- No. 853.—Rodgers Fence Co. Former recommendations made in reference to elevator have been complied with.
- No. 858.—The Springfield Machine Co. Provide guards for buzz-saws; place casing or railing around fly-wheel of engine.
- No. 859.—Ross & Hullidger. Provide guards for rip-saws; place casing or railing around fly-wheel of engine.
- No. 863.—Champion Electric Light Co. Place guard around all exposed belts and pulleys.
- No. 869.—Miller Carriage Co. Put guard on band-saw, above the table, and also casing in front of lower pulley of same saw.
- No. 870.—Mack, Dickinson & Co. Place protection around fly-wheels of both engines; casing in front of lower pulleys of band-saws; provide guard for buzz-saw.
- No. 871.—Chichester & Haviland. Former recommendations in reference to machinery have been complied with.
- No. 901.—G. Lautenschlager. Post minors' notices. Complied.
- No. 905.—W. H. Hoffman. Post minors' notices. Complied.
- No. 906.—Williams & Co. Post minors' notices. Complied.
- No. 907.—The James L. Haven Co. Put in good condition guards at elevator openings; place board under large driving belt to prevent employes or other persons from being injured in case belt should break; put in safe condition railing on stairway, also stairway leading to wood-working department; provide guards for saws.
- No. 908.—Howells & Co. Place boxing around belt in work-room of first floor sufficiently high to prevent the catching of the clothing of employes.
- No. 909.—The Henry Siebel Printing Co. Post minors' notices. Complied.
- No. 911.—Oppenheimer, Fecker & Co. Post minors' notices. Complied.
- No. 912.—W. T. Eichelberger. Post minors' notices. Complied.
- No. 913.—James O. Connor. Post minors' notices. Complied.
- No. 914.—Henry G. Meyer & Co. Post minors' notices. Complied.
- No. 918.—Ross, Moyer & Co. Post notices relating to minors. Complied.
- No. 920.—David Reeves. Post notices relating to minors. Complied.
- No. 923.—J. Kirchmer. Post notices relating to minors. Complied.
- No. 925.—J. C. Ritchie. Post notices relating to minors. Complied.
- No. 931.—Enterprise Variety Works. Post notices relating to minors. Complied.
- No. 932.—Oskamp, Nolting & Co. Post notices relating to minors. Complied.
- No. 938.—F. A. Klaine. Post notices relating to minors. Complied.
- No. 939.—Strootman & Derkes. Post notices in relation to minors; place guard around fly-wheel and shafting. Complied.
- No. 941.—John Callam & Co. Provide saw-guard for rip-saw.
- No. 942.—John Callam & Co. Provide saw-guard for rip-saw.
- No. 943.—G. H. Palmer & Co. Post notices in relation to minors. Complied.
- No. 944.—Scioto Straw Board Co. Former recommendations, in reference to machinery, have been complied with.
- No. 953.—C., H. & D. R. R. Shops. Former recommendations, in reference to machinery, have been complied with.

- No. 962.—Evan Davis. Provide guard for rip-saw.
- No. 963.—Johns, Tegeder & Hughes. Provide guards for buzz-saws; guard band-saw above the table, and place casing in front of lower pulley; provide better means for ventilation by putting in exhaust-fan and pipes for wood-working machinery, sandpaper machines, etc., in order to carry away dust from same.
- No. 964.—Myers & Mackenzie. Cover belt driving Round's sectional roller from the machine to a post three feet west; put casing up around three sides of pulley and belt on south end of fly-wheel shaft, at least three feet high.
- No. 965.—The Heffner Wheel Co. Post notices in reference to minors. Complied.
- No. 972.—Krift & Ricker. Provide guard for buzz-saw.
- No. 973.—David Mining. Provide guard for buzz-saw; box belt driving sandpaper machine.
- No. 974.—Washington Stave Co. Former changes recommended, in reference to machinery, have been complied with.
- No. 979.—Ohio Wheel Co. Former recommendations, in reference to elevator, complied with.
- No. 982.—Jacob Schaffer. Provide belt driving planer with shifter; guard for buzz-saw.
- No. 987.—J. A. Gleason & Brother. Former recommendations, in reference to machinery, have been complied with.
- No. 988.—A. & F. Gleason. Former recommendations, in reference to machinery, have been complied with.
- No. 989.—People's Milling Association. Former recommendations, in reference to machinery, have been complied with.
- No. 990.—D. Spangler. Former recommendations, in reference to machinery, have been complied with.
- No. 994.—Union Mills Flouring Co. Enclose fly-wheel of engine with casing or railing.
- No. 995.—W. A. Clark. Place protection in front of pulleys on rolls in passage-way.
- No. 1000.—Timmonds & Estry. Former changes recommended, in reference to machinery, have been complied with.
- No. 1002.—Celina City Mills. Box main belt above second floor three feet high; cover cog gearing at the head of upper stairs; place hand-railing on stairway, also railing around opening of stairs on upper floor.
- No. 1005.—L. Bimel & Son. Former orders, in reference to machinery, have been complied with.
- No. 1013.—The Wapakoneta Spoke and Wheel Co. Former changes ordered, in reference to machinery and ventilation, have been complied with.
- No. 1018.—Theodore Dickman. Provide guard for buzz-saw; place casing in front of lower pulley of band-saw; provide shifters for all belts necessary to be shifted.
- No. 1019.—Swink Brothers & Co. Provide buzz-saw with saw-guard.
- No. 1025.—The Globe Soap Co. Post notices in reference to the employment of minors. Complied.
- No. 1026.—Meyer, Nagel & Co. Place guard around fly-wheel of engine; hood over glue kettle to carry away steam; ventilators in ends of sky-lights, so that they can be opened or closed as desired; guard or box belting on machine on fourth floor; post notices relative to the employment of minors.
- No. 1038.—Hoffman & Ahlers. Post notices in reference to employment of minors. Complied.
- No. 1045.—Fred. Weber & Brother. Post notices in reference to employment of minors. Complied.

- No. 1046.—John Dziech & Son. Post notices in reference to the employment of minors. Complied.
- No. 1050. The Snow Flake Laundry. Post notices in reference to the employment of minors. Complied.
- No. 1053.—S. Rosenthal. Post notices in reference to the employment of minors. Complied.
- No. 1054.—Cincinnati Type Foundry. Post notices in reference to the employment of minors. Complied.
- No. 1069.—P. F. Carcaba. Post notices in reference to employment of minors. Complied.
- No. 1076.—The Field Cordage Co. Former changes ordered, in reference to machinery and elevator, have been complied with.
- No. 1078.—Charles Burdell & Co. Provide saw-guard for buzz-saw.
- No. 1079.—E. N. Forsyth. Place protection in front of main driving pulley and belt between pulley and truck track.
- No. 1080.—Hawkins & Spray. Former changes ordered in reference to machinery, complied with.
- No. 1083.—The Clinton Manufacturing Co. Former changes ordered, in reference to machinery, have been complied with.
- No. 1087.—The Fulton Milling Co. Former changes ordered, in reference to machinery, complied with.
- No. 1090.—P. T. Schultz. Post notices in reference to employment of minors. Complied.
- No. 1093.—H. Pearce Sons. Post notices in reference to employment of minors and keep record of all minors in your employ under the age of eighteen years. Complied.
- No. 1094.—H. C. Sherick. Post notices in reference to employment of minors. Complied.
- No. 1098.—Greenfield Woolen Mills. Former changes ordered, in reference to machinery, have been complied with.
- No. 1102.—John M. Waddel Manufacturing Co. Post notices in reference to employment of minors. Complied.
- No. 1118.—C. A. Boush & Co. Former changes ordered, in reference to machinery, have been complied with.

SUMMARY.

Number males, females and minors employed in shops, etc., inspected during year in First District:

Males.....	67,385	
Females	9,409	
Minors.....	7,119	
Total.....		83,913

Number males, females and minors employed in shops, etc., inspected during year in Second District:

Males.....	19,253	
Females	2,365	
Minors.....	1,080	
Total.....		22,698

Number males, females and minors employed in shops, etc., inspected during year in Third District:

Males.....	43,770	
Females.....	10,166	
Minors.....	4,128	
Total.....		58,064
Total employed.....		164,675

Condition of shops, etc., inspected in First District:

Good.....	999	
Fair	288	
First class.....	154	
Bad.....	7	
Total shops, etc., First District.....		1,448

Condition of shops, etc., inspected in Second District:

Good.....	599	
Fair	65	
First class.....	39	
Bad.....	1	
Total shops, etc., Second District.....		704

Condition of shops, etc., inspected in Third District:

Good.....	855
Fair	89
First class.....	171
Bad.....	4
Total shops, etc., Third District.....	1,119
Total number shops, etc., inspected.....	3,271

Changes ordered in shops, etc., inspected in First District,
as to—

Machinery	420
Elevators	82
Fire-escapes	21
Minors	45
Ventilation	8
Building	8
Water-closets	8
Sanitary.....	10
Seats for females.....	3
Heating of building.....	2
Total.....	607

Changes ordered in shops, etc., inspected in Second District,
as to—

Machinery.....	104
Elevators	7
Fire-escapes	3
Minors	15
Building	5
Total.....	134

Changes ordered in shops, etc., inspected in Third District,
as to—

Machinery.....	171
Elevators	57
Fire-escapes	44
Minors	336
Ventilation	9
Building	15
Water-closets	3
Sanitary.....	10
Total.....	645
Total changes ordered.....	1,386

Below will be found the number of males, females and minors employed in workshops, factories and mercantile establishments inspected, of the five largest cities of the State, total of each city and grand total :

Cleveland, 730 shops, factories, etc., inspected—

Males	29,133	
Females	4,686	
Minors	2,862	
Total		36,681

Cincinnati, 712 shops, factories, etc., inspected—

Males	24,340	
Females	7,032	
Minors	2,416	
Total		33,788

Dayton, 129 shops, factories, etc., inspected—

Males	6,404	
Females	1,736	
Minors	917	
Total		9,057

Columbus, 228 shops, factories, etc., inspected—

Males	7,260	
Females	1,240	
Minors	302	
Total		8,802

Toledo, 159 shops, factories, etc., inspected—

Males	5,791	
Females	1,225	
Minors	544	
Total		7,560

Total number employed in shops, etc., inspected in five largest cities.....	95,888
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It must be understood, however, that the above figures are only for shops, etc., visited during the year, and do not include a great number of shops in each of the above-named cities which have not been inspected.

Owing to the fact that the Second District contains fewer shops and factories than either of the others, the inspector of that district visited the following counties in the First and Third Districts:

First District—Belmont, Columbiana and Jefferson counties.

Third District—Allen, Auglaize, Champaign, Clarke, Clinton, Greene, Hardin, Highland, Logan, Mercer and Van Wert counties.

Accidents

REPORTED TO THIS DEPARTMENT SINCE THE PASSAGE OF THE ACT,
MARCH 21, 1888, TO NOVEMBER 15, 1888.

FIRST DISTRICT.

KILLED.

May 23, 1888. Charles Hodgman and Clem. England, aged respectively 12 and 17 years; employed by Wm. Hodgman, Portage, Wood county. Cause of accident: Explosion of boiler. At what employed: Lumber saw mill. Nature and extent of injury: Instantly killed.

General Remarks.—Wm. Hodgman was running the engine himself. Clem. England was at the time engaged throwing the stove wood from the cut-off saw, outside of the mill. Wm. Hodgman had tested the water and the steam at 1:30 p. m., finding from one gauge to twenty barrels of water, and forty pounds of steam, and the explosion occurred at 1:45 P. M. The water pumps were running while the men were at dinner, and until the accident occurred, the saw not having been started.

WM. HODGMAN.

August 3, 1888. Christian Baltz, aged 50 years; married; employed by Standard Oil Co., 783 Broadway, Cleveland, Cuyahoga county. Cause of accident: Break in the machine in his charge. At what employed: Running planing machine. Nature and extent of injury: Piece of iron entered his right side, under the arm, causing death six hours after accident.

General Remarks.—The family of the deceased reside in Allegheny City, Pa. We learn that the family consists of his wife, three grown-up daughters, two of whom are married, one boy who assists in supporting the family, and a son and daughter of 12 and 15 years of age, respectively.

STANDARD OIL CO.

September 1, 1888. Colleta Kelly, aged 2 years and 5 months; run over by street car on line of Central Street Railway Co., Toledo, Lucas county. Nature and extent of injury: Sufficient to cause immediate death.

General Remarks.—The child had crossed the track of the company with another child about three years of age, and immediately turned to go back, directly in front of the car. The driver made great effort to stop the car, but it was impossible for him to do so till the wheel had passed over the child. This report is made from the best information we can obtain.

THE CENTRAL STREET RAILWAY CO.

September 15, 1888. Peter Geirman and Emile Huisgen, aged 22 and 23 years, respectively; single; employed by M. B. Clark & Son, 265 Merwin street, Cleveland, Cuyahoga county. Cause of accident: Fire and explosion of dust-rooms. At what employed: Spoutsman and laborer.

General Remarks.—Huisgen has no relatives in this country. Geirman has a mother, bothers and sisters; had his life insured for \$500; was a laborer. He was in bran bin shoveling bran at time of explosion. The dust-room exhausted into the bin. Probably this man and bin was the cause of the fire—his lantern coming in contact with the dust. In all probability he took the light out of the globe and the dust ignited. This is the most plausible reason we can give for this sad accident.

M. B. CLARK & SON.

September 15, 1888. B. Woodhall, aged 65 years; married; employed by Milburn Wagon Co., Monroe street, Toledo, Lucas county. Cause of accident: Piece of wood caught between elevator and the wall, holding the elevator until rope unwound. He, with another man, removed the piece, elevator dropped, causing internal injury, and death ensued. At what employed: Trucking. Number of persons deprived of support in consequence of accident: Four—all large enough to work.

MILBURN WAGON CO.

SECOND DISTRICT.

KILLED.

April 15, 1888. James Hunter, aged about 25 years; single; employed by King, Gilbert & Warner (Franklin Furnace), Marion township, Franklin county. Cause of accident: Thought to be from falling from elevator while trying to run it himself. It was not his duty to run the elevator, nor was it time for him to go to work. At what employed: Assisting top filler. Number of persons deprived of support in consequence of accident: None. Expense thereby incurred: Funeral expenses paid by firm.

KING, GILBERT & WARNER.

May 3, 1888. George Terwilleger and Jesse Beckom, ages not known; married; employed by John Rouzer & Co., of Dayton, Montgomery county, on Board of Trade Building, at Columbus. Cause of accident (Coroner's verdict): "I do find that the said George Terwilleger and Jesse Beckom came to their death by the falling of the arch in the southwest corner of the Board of Trade Building, caused by negligence in the construction of said arch, thereby rendering the same unsafe and dangerous." At what employed: Carpentering; at the time of accident, removing supports under arch, when it gave way. Number of persons deprived of support in consequence of accident: Four.

JOHN ROUZER & Co.

August 7, 1888. John L. Rusland, aged 25 years; married; employed by Higbee & Giesy, 26 Park avenue, Columbus, Franklin county. Cause of accident: Bursting of wooden wheel. At what employed: Polishing and plating. Number of persons deprived of support in consequence of accident: Three. Nature and extent of injury: Fracture of skull at base of brain, causing death same day of accident.

HIGBEE & GIESY.

August 31, 1888. Edgar Shepard, aged 35 years; married; employed by George Knapfer, North Third street, Newark, Licking county. Cause of accident: Collapse of the Geo. R. Scott building. At what employed: Carpentering. Number of persons deprived of support in consequence of accident: Wife and three children. Nature and extent of injury: Crushed to death by falling of walls.

General Remarks.—I have filled out this blank, but am not the contractor, only sub-contractor.

September—, 1888. Eli G. Donaldson, aged 25 years; single; injured on line of The Columbus Consolidated Street Railroad Co. (State and Oak Street Branch), Columbus, Franklin county. Cause of accident: We are informed that the party injured attempted to board a car on State street at the front platform, having in his hand, or on his arm, a large package, that he fell and sustained an injury to his left arm. At what employed: Don't know. Number of persons deprived of support in consequence of the accident: Don't know. Nature and extent of injury: Are not informed. He appears to have recovered partially, so as to have been about the streets on business, but subsequently was taken ill and died on or about October 11. How long continuously disabled: About three weeks. Expense thereby incurred: Don't know. Loss of time and amount of Wages: Don't know.

General Remarks.—We are unable to state the cause of his death, or what connection, if any, it had with the accident. The statement above, as to the manner in which the accident occurred, was made substantially to an officer of this company by the party injured.

A. D. RODGEES, *President.*

THIRD DISTRICT.

KILLED.

June 19, 1888. B. T. Wright, aged about 30 years; single; employed by The Egan Co., 250 West Front street, Cincinnati, Hamilton county. Cause of accident: Thoughtlessness on the part of above-named person in putting his head between the work and the tool-post of an iron-planer. At what employed: Planing iron castings. Number of persons deprived of support in consequence of accident: None. Nature and extent of injury: Fracture of skull.

THE EGAN COMPANY.

August 27, 1888. Michael Schlarth, aged 57 years; married; employed by W. P. Levis, Dayton, Montgomery county. Cause of accident: Caught between belt and pulley while throwing off belt. At what employed: Laborer. Number of persons deprived of support in consequence of the accident: His wife. Nature and extent of injury: Killed instantly. Expense thereby incurred: Bills have not yet been presented.

General Remarks.—The above-named had been in my employ for sixteen years. He was a little headstrong and became careless. I noticed this, and cautioned him almost daily, as all my hands know. His step-son had his arm taken off in my mill about six years ago; he was then a boy. I paid all bills in connection therewith, paid him his wages while laid up, took him back when he became able to work, and advanced his wages to \$1.25 per day. He is now employed by me.

W. G. LEVIS.

October 1, 1888. Louis Ernst, aged 16 years and 6 months; employed by John Stengel & Co., 333-339 Taylor street, Dayton, Montgomery county. Cause of accident: Caught by cross-head of engine, then thrown onto crank and instantly killed. At what employed: Handling pieces of lumber.

General Remarks.—How the boy was caught we are unable to state. He, in company with a man, was engaged in piling up pieces of lumber along side of boiler, and when he carried the lumber to the man, who done the piling, it was necessary for him to pass the engine. There was three and one-half feet space in which to pass; and when the accident occurred he had nothing in his hands, therefore it is a mystery to us how he could have been caught and not able to save himself.

JOHN STENGEL & Co.

October 29, 1888. Moses B. Gaskill, aged 48 years; married; employed by Peirce & Coleman, 132 Wayne avenue, Dayton, Montgomery county. Cause of accident: Large splinter thrown by circular re-saw. At what employed: Running circular re-saw. Number of persons deprived of support in consequence of accident: Two. Nature and extent of injury: Splinter driven into neck at base of skull, causing death.

PEIRCE & COLEMAN.

FIRST DISTRICT.

INJURED.

March 20, 1888. Evan J. Davis, aged 62 years; widower; employed by Jos. Carns & Son, Massillon, Stark county: Cause of accident: Carelessness of a fellow-workman. At what employed: Rolls. Number of persons deprived of support in consequence of accident: One. Nature and extent of injury: Burned on legs. Length of time continuously disabled: Three weeks. Expense thereby incurred: None. Loss of time and amount of wages: \$25.00.

JOS. CARNS & SON.

April 12, 1888. John Kelly, aged 24 years; married; employed by Jos. Carns & Son, Massillon, Stark county. Cause of accident: Cannot describe. At what employed: Rolls. Number of persons deprived of support in consequence of accident: Two. Nature and extent of injury: Burned on ankle. How long continuously disabled: Two weeks. Expense thereby incurred: \$10.00. Loss of time and amount of wages: \$25.00.

JOS. CARNS & SON.

April 18, 1888. John Eagan, aged 22 years; single; employed by Jos. Carns & Son, Massillon, Stark county. Cause of accident: Hot iron not following its regular course from rolls. At what employed: Rolls. Number of persons deprived of support in consequence of accident: One. Nature and extent of injury: Burned on arms and breast. How long continuously disabled: Ten weeks. Expense thereby incurred: \$25.00. Loss of wages: \$60.00.

JOS. CARNS & SON.

May 1, 1888. John Gallagher, aged 16 years; employed by Cleveland Rolling Mill Co., Cleveland, Cuyahoga county. Cause of accident: Struck his head on a hot rod upon which he fell. At what employed: Water boy in rod mill. Nature and extent of injury: Scalp wound about four inches in length on right frontal region. How long continuously disabled: About one month. Loss of wages: About 45 cents per day for time lost.

CLEVELAND ROLLING MILL CO.

May 23, 1888. Barney Doyle, aged 50 years; married; employed by Cleveland Rolling Mill Co., Cleveland, Cuyahoga county. Cause of accident: Not reported. At what employed: Wheeling wheelbarrow. Nature and extent of injury: Laceration and contusion of left leg below the knee. How long continuously disabled: Still confined to the house at this date (June 6). Loss of wages: From \$1.15 to \$1.25 per day.

CLEVELAND ROLLING MILL CO.

May 23, 1888. Wm. Hodgman, proprietor, and Wes. Pelton, employed by Wm. Hodgman, Portage, Wood county. Cause of accident: Explosion of boiler. At what

employed: Sawing lumber. Nature and extent of injury: Slightly injured. How long continuously disabled: One week, or possibly eight days. Expense thereby incurred: Expense of medical treatment—a nominal sum. Loss of time and amount of wages: Not regularly employed.

WM. HODGMAN.

May 31, 1888. Thomas Foulkes, aged 30 years; married; employed by Cleveland Rolling Mill Co., Cleveland, Cuyahoga county. Cause of accident: Caught hand in belt connected with steam pump. At what employed: Engineer. Number of persons deprived of support in consequence of accident: Wife, self and three children. Nature and extent of injury: Loss of all fingers and thumb of right hand. How long continuously disabled: Still unable to go to work at this date (June 14). Loss of wages: \$2.90 per day.

CLEVELAND ROLLING MILL CO.

June 8, 1888. John Marchinkofoki, aged 20 years; single; employed by Cleveland Rolling Mill Co., Cleveland, Cuyahoga county. Cause of accident: Melted zinc flew from pot. At what employed: Laborer. Nature and extent of injury: Burned on face and arms from melted zinc. How long continuously disabled: About three weeks. Loss of wages: \$1.25 per day.

CLEVELAND ROLLING MILL CO.

June 14, 1888. Daniel Garvey, aged 28 years; single; employed by Cleveland Rolling Mill Co., Cleveland, Cuyahoga county. Cause of accident: Struck with piece of plate iron. At what employed: Rougher. Nature and extent of injury: Laceration of knee. How long continuously disabled: Sixteen days. Loss of wages: About \$4.00 per day.

General Remarks.—Unable to state amount of expense, other than time lost and amount of wages.

CLEVELAND ROLLING MILL CO.

June 25, 1888. James Meehan, aged 32 years; married; employed by the Cleveland Rolling Mill Co., Cleveland, Cuyahoga county. Cause of accident: Struck by a piece of slag. At what employed: Finisher at rolls. Number of persons deprived of support in consequence of accident: Four. Nature and extent of injury: Scalp wound about 3½ inches long, with concussion. How long continuously disabled: Two weeks. Loss of time and amount of wages: \$3.75 per day.

CLEVELAND ROLLING MILL CO.

June 30, 1888. David Harrison, aged 47 years; married; employed by Cleveland Rolling Mill Co., Cleveland, Cuyahoga county. Cause of accident: Struck with pair of tongs. At what employed: Laborer. Number of persons deprived of support in consequence of accident: Two. Nature and extent of injury: Scalp wound 3 inches in length, and concussion. How long disabled: About ten days. Loss of time and amount of wages: \$1.25 per day.

CLEVELAND ROLLING MILL CO.

June 18, 1888. Frank Monroe, aged 20 years; single; employed by T. D. Yost, Minerva, Stark county. Cause of accident: Caught fingers in shaper. At what employed: Running shaper. Nature and extent of injury: One finger on left hand cut off at first joint, two fingers slightly injured. How long disabled: Not able yet to resume labor—expects to go to work July 30. Loss of time and amount of wages: About six weeks—\$36.00.

T. D. YOST.

August 6, 1888. Thomas McDonald, aged 28 years; married; employed by the Walker Manufacturing Co., Waverly and Breakwater streets, Cleveland, Cuyahoga county. Cause of accident: Hot metal splashed over ladle he was carrying. At what employed: Molding. Number of persons deprived of support in consequence of accident: Has wife, but do not know if there is offspring. Nature and extent of injury: Foot severely burned. Loss of time and amount of wages: About nine days, at \$2.50 per day, up to date, August 30.

General Remarks.—The above-named was at his work for about two weeks after the accident, without loss of time, but has now been absent from shop since August 20. We are not certain that the cause is from the burn, but presume so.

WALKER MANUFACTURING CO.

September 10, 1888. Laura Hunsinger, aged 21 years; single; employed by Fremont Canning Works, 317 South street, Fremont, Sandusky county. Cause of accident: Carelessness on part of person injured. At what employed: Cutting machine—cutting corn from cob. Nature and extent of injury: One bone broken in right arm below elbow. How long continuously disabled: Not able to work at this date, September 20. Loss of wages: Receiving \$1.00 per day.

General Remarks.—This is the first accident that ever occurred in our works.

FREMONT CANNING WORKS.

September 15, 1888. Frank Luby, Sterling Barbor, William Strah and ——— Van Neil, average age, 22 years; one married, three single; employed by M. B. Clark & Son, 265 Merwin street, Cleveland, Cuyahoga county. Cause of accident: Fire and explosion of dust rooms; dust became ignited by fire, causing spread of flames throughout mill almost instantly. Nature and extent of injury: Burned on hands and face—all surface burns. Mr. Strah had back burned slightly. How long continuously disabled: Three of above-named disabled for four weeks, one for about six weeks. Expense thereby incurred: Do not know. Loss of time and amount of wages: Aggregate, \$300.

M. B. CLARK & SON.

October 18, 1888. Michael Esterl, aged 16 years; employed by Western Manufacturing Co., Water and Vine streets, Toledo, Lucas county. Cause of accident: Can not assign any particular cause; above-named passed by saw and put his hand on same when saw was in motion. At what employed; Helper to sawyer. Nature and extent of injury: Loss of two fingers on left hand. How long continuously disabled: Can not say at this date (October 26), but think about sixty days. Expense thereby incurred: Expense of surgeon. Loss of time and amount of wages: Was earning 75 cents per day.

WESTERN MANUFACTURING CO.

October 19, 1888. Bridget Welsh, aged about 21 years; single; employed by the Youngstown Stamping Co., 361 East Boardman street, Youngstown, Mahoning county. Cause of accident: Caught her fingers between the pressing dies of drawing press. At what employed: Pressing screw tops. Nature and extent of injury: First and second fingers of right hand taken off between first and second joints. How long continuously disabled, expense thereby incurred, loss of time and amount of wages: Not stated.

General Remarks.—We have printed notices posted in the workshops warning workmen to work strictly according to instructions. The person injured was instructed accordingly, but appears to have been working carelessly when accident occurred. The press is new and in good order, and has been in use daily for eighteen months without accident until this time.

YOUNGSTOWN STAMPING CO.

October 22, 1888. W. C. Watson, J. M. McClelland, and man unknown, aged respectively 40, 30 and about 50 years; first-named single, second married, and third unknown; injured at works of Findlay Pressed Brick Co., Stewartville, Hancock county. Cause of accident: Natural gas explosion. At what employed: W. C. Watson, manager of works, the other two were visitors. Nature and extent of injury: Scorched—not seriously or dangerously burned.

FINDLAY PRESSED BRICK CO.

SECOND DISTRICT.

INJURED.

May 1, 1888. John Breeze, aged about 30 years; single; employed by Columbus Sewer Pipe Co., near Columbus, Clinton township, Franklin county. Cause of accident: Caving in of earth. At what employed: Digging clay. Nature and extent of injury: Broken leg. How long continuously disabled: Not yet recovered at this date, June 23. Loss of time and amount of wages: \$1.40 per day.

General Remarks.—Accident occurred about one-fourth of a mile away from works.

COLUMBUS SEWER PIPE CO.

May 2, 1888. Jacob Riehl, age not known; married; employed by the Ohio Buggy Co., 284 North Fourth street, Columbus, Franklin county. Cause of accident: Carelessness in using a power drill. At what employed: Drilling buggy irons. Nature and extent of injury: Flesh wound on two fingers of left hand. How long continuously disabled: Ten days in use of one hand. Loss of time and amount of wages: Ten days, at \$1.50 per day, \$15.00.

OHIO BUGGY CO.

May 3, 1888. Samuel Coleman, age not known; married; employed by John Rouzer & Co., of Dayton, Montgomery county, on Board of Trade building, Columbus. Cause of accident: Negligence in the construction of arch in the southwest corner of said building, rendering the same unsafe and dangerous; props or supports were being taken out, when arch gave way, burying Mr. Coleman in the debris. At what employed: Carpentering. Number of persons deprived of support in consequence of the accident: Three. Nature and extent of injury: Bruised and scratched. How long continuously disabled, expense thereby incurred, loss of time and amount of wages: Not known.

JOHN ROUZER & CO.

May 9, 1888. E. R. Braddock, aged 38 years; single; employed by J. W. Dann Manufacturing Co., Columbus, Franklin county. Cause of accident: Bitts became loose in shaper and flew out. At what employed: Seat-making. Nature and extent of injury: Two fingers wounded. How long continuously disabled: Only partially disabled. Loss of time and amount of wages: No time lost.

General Remarks.—One of those accidents that are unavoidable.

J. W. DANN MANUFACTURING CO.

June 4, 1888. Frederick Freer, aged 22 years; married; employed by M. Krieg & Son, Nelsonville, Athens county. Cause of accident: Forgetfulness or indifference to danger. At what employed: Universal wood-worker, jointing white pine, 1x6 inches, 8 feet long. Number of persons deprived of support in consequence of accident: Wife and child. Nature and extent of injury: Index finger of left hand amputated at metacarpophalangeal joint; middle finger, last phalanx split, small part of bone removed; ring finger lost at first joint; little finger amputated between second joint and metacarpophalangeal joint.

phalangeal joint; a gash one and one-half inches long on thumb, all injuries confined to left hand. How long continuously disabled: About three months. Expense thereby incurred: Do not know. Loss of time and amount of wages: \$2.00 per day.

General Remarks.—The subject of the above accident has been in our employ about eight months, is a fair hand with machinery. His only fault is indifference to danger. He was jointing 1x6 inches, white pine, 8 feet long, and center of piece was over cylinder when accident occurred. He does not know how it occurred. His index finger on his left hand has been disabled about five years, caused by the accidental discharge of a revolver, ball passing through joint at base of finger, leaving it not more than two-thirds natural size and a hindrance.

M. KRIEG & SON.

June 15, 1888. Mary Lemen, aged 14 years; single; employed by John Little, assignee for Hoover & Allison, 127 South Sixth street, Zanesville, Muskingum county. Cause of accident: Carelessness. At what employment: Sweeping. Nature and extent of injury: One finger mashed. How long continuously disabled: Three weeks. Expense thereby incurred: About \$10. Loss of time and amount of wages: No lost time or wages.

General Remarks.—She had only been working four days, and everything being new to her, she was prompted by curiosity to reach up and place her finger where it was caught between two cog-wheels. The inspector examined the room two days before and pronounced everything safe and in good order.

JOHN LITTLE, Assignee for HOOVER & ALLISON.

July 2, 1888. Jess. Cannon, aged 19 years; single; employed by M. C. Whitehurst & Sons, Canal Winchester, Franklin county. Cause of accident: Carelessness. At what employed: Oiling machinery when injured. Nature and extent of injury: Loss of left hand.

General Remarks.—The injured man is still disabled at this date (July 10) and under care of doctor. He and two brothers supported their mother, consequently she is partially deprived of support.

M. C. WHITEHURST & SONS.

July 12, 1888. James Ross, aged 38 years; married; employed by Doerzbach & Decker, Circleville, Pickaway county. Cause of accident: Carelessness on the part of the person injured. At what employed: Derrick man. Number of persons deprived of support in consequence of accident, and nature and extent of injury: Not given. How long continuously disabled: Eleven days. Amount of wages lost, \$19.25.

General Remarks.—We paid the doctor bill of the injured man, amounting to \$24.75.

DOERZBACH & DECKER.

July 12, 1888. John Martin, aged 36 years; married; employed by Peter Schille, Main and Lazelle streets, Columbus, Franklin county. Cause of accident: Bursting of bottle. At what employed: Bottling. Number of persons deprived of support in consequence of accident: None. Nature and extent of injury: Cut about right ear. How long continuously disabled: One week. Expense thereby incurred: Expense paid by firm. Loss of time and amount of wages: The amount of wages, \$15, and the doctor bill was paid by me.

General Remarks.—The accident was caused by carelessness on the part of the person injured.

PETER SCHILLE.

July 23, 1888. George Kinser, aged 42 years; married; employed by Doerzbach & Decker, Circleville, Pickaway county. Cause of accident: Carelessness on the part of

person injured. At what employed: Derrick man. Nature and extent of injury: Loss of one finger. Number of persons deprived of support in consequence of accident, how long continuously disabled, expense thereby incurred, loss of time and amount of wages: Not stated.

General Remarks.—The injured man took hold of large cog-wheel to turn it, and run his hand between the wheels, cutting off one finger.

DOERZBACH & DECKER.

August 2, 1888. Charles Columber, aged 24 years; married; employed by Logan Manufacturing Co., Front street, Logan, Hocking county. Cause of accident: Carelessly reaching over saw. At what employed: Ripping lumber on buzz-saw. Number of persons deprived of support in consequence of accident: Three. Nature and extent of injury: Three fingers of left hand cut off. How long continuously disabled: About thirty days. Loss of time and amount of wages: Thirty days, at \$1.40 per day, \$42.00.

General Remarks.—We had a saw-guard on and he took it off, and was notified at that time that if he should be injured by the saw that it would be his own fault.

LOGAN MANUFACTURING CO.

August 8, 1888. John Strickler, aged 60 years; widower; employed by Columbus Cabinet Co., Columbus, Franklin county. Cause of accident: Breaking of band-saw. At what employed: Sawing on band-saw. Nature and extent of injury: First finger taken off at second joint. How long continuously disabled: Four days. Expense thereby incurred: Surgeon's bill not received. Loss of time and amount of wages: None.

General Remarks.—Finger healed up nicely in a short time.

COLUMBUS CABINET CO.

August 20, 1888. Jacob Koetz, aged 35 years; married; employed by Columbus Cabinet Co., Columbus, Franklin county. Cause of accident: Slipped backward and hand came in contact with saw. At what employed: Circular saw. Number of persons deprived of support in consequence of accident: Do not know. Nature and extent of injury: Loss of thumb on right hand. How long continuously disabled: Not well yet at this date (Sept. 27). Expense thereby incurred and loss of time and amount of wages: Don't know.

COLUMBUS CABINET CO.

September 23, 1888. Jacob Niedermann, aged 40 years; single; employed by N. Schlee, 526-544 South Front street, Columbus, Franklin county. Cause of accident: Carelessness on the part of person injured. At what employed: Washing casks. Nature and extent of injury: Scalded on left leg. How long continuously disabled: Two weeks. Loss of time and amount of wages: Two weeks, \$22.50.

N. SCHLEE.

September 25, 1888. William Shaw, aged 20 years; single; employed by Motherwell Iron and Steel Co., Logan, Hocking county. Cause of accident: Explosion of lamp. At what employed: Hammer man. Nature and extent of injury: Hands and breast slightly burned. How long continuously disabled: Three weeks. Expense thereby incurred: Loss of time only. Loss of wages: \$30.00.

General Remarks.—Accident was caused by carelessness of person injured putting his lamp too close to hammer.

MOTHERWELL IRON AND STEEL CO.

September 27, 1888. John M. Kiser, aged 32 years; single; employed by the Ohio Coffee and Spice Co., 77-81 East Long street, Columbus, Franklin county. Cause of ac-

cident: Fall of elevator. At what employed: Secretary and Treasurer of above company. Nature and extent of injury: Scalp wound. How long continuously disabled: Possibly thirty days. Loss of time and amount of wages: Business continues and wages goes on.

General Remarks.—For further particulars, refer to Dr. Hamilton.

THE OHIO COFFEE AND SPICE CO.

October 1, 1888. William R. Huddleson, aged 13 years; employed by Drew, Selby & Co., Third and Gay streets, Portsmouth, Scioto county. Cause of accident: Carelessness about the machine he worked at, not in the line of his duties. Had he been in his proper place, could not have been hurt. At what employed: Feeding nails to a heel attaching machine. Nature and extent of injury: Right hand amputated just above wrist joint. How long continuously disabled: Can not say at this date (October 22), but he is now getting along well, and it will take usual time for wound to heal. Loss of time and amount of wages: Firm continues wages, \$2.50 per week.

General Remarks.—On account of limited circumstances of family, employees of factory made up a purse of about \$275, and firm continues wages for present.

DREW, SELBY & CO.

THIRD DISTRICT.

INJURED.

May 18, 1888. Henry Maynard, aged —; married; employed by the Cincinnati Electro Plating Works, 225 Elm street, Cincinnati, Hamilton county. Cause of accident: Leather-covered wood emery-wheel stripped while in use, caused by the sharp edge of the iron being polished striking against the seam or joint of leather cover on wheel. At what employed: Emery polishing. Number of persons deprived of support in consequence of accident: Himself and wife. Nature and extent of injury: Bad scalp wound, but not dangerous; will soon recover. How long continuously disabled: One week, up to time of reporting accident (May 25). Expense thereby incurred: Not known. Loss of time and amount of wages: Cannot say, as he worked at piece-work, and work is uncertain in a job shop; if he had steady work could make about \$12.00 per week.

General Remarks.—The above description is supposed to be the manner in which the accident occurred. Such accidents are frequent, and will happen to old experienced men at the business. The wooden wheels are covered with heavy leather, then with glue and emery, and, if handled with care, are not in any way dangerous. The fault was due in the above case wholly to man injured; nothing was wrong with machinery or building.

CINCINNATI ELECTRO PLATING WORKS.

May 21, 1888. Albert Wessling, aged 20 years; single; employed by F. Lunkenheimer (Cincinnati Brass Works), 15 East Eighth street, Cincinnati, Hamilton county. Cause of accident: Foreman of foundry hastily tossing a "skimmer" to another workman, the "skimmer" bounding from some obstacle and striking the employee named above. At what employed: Molding. Nature and extent of injury: Eye-lid badly burned, but sight not destroyed. How long continuously disabled: About three weeks. Expense thereby incurred: Not known. Loss of time and amount of wages: Three weeks, at \$18 per week, \$54.

F. LUNKENHEIMER.

May 30, 1888. John Chambers, aged 19 years; single; employed by American Oak Leather Co., Kenner street and Dalton avenue, Cincinnati, Hamilton county. Cause of accident: Carelessness—trying to turn a truck on elevator platform. At what employed: Laborer. Nature and extent of injury: Small bone of right leg broken. How long continuously disabled: Will go to work September 1st. Expense thereby incurred: None. Loss of time and amount of wages: None.

AMERICAN OAK LEATHER CO.

June 2, 1888. Jacob Huntsbarger, aged 49 years; married; employed by Harding Paper Co., Excello, Butler county. Cause of accident: Dropping hand on circular saw. At what employed: Millwright. Number of persons deprived of support in consequence of accident: None. Nature and extent of injury: Hand torn badly and bone of little finger cut off. How long continuously disabled: Not yet well at this date (June 20). Expense thereby incurred and loss of time and amount of wages: Cannot say at this date.

General Remarks.—Cannot explain how accident happened. The person injured knew saw was in motion, but dropped his hand on it unthoughtedly.

HARDING PAPER CO.

June 19, 1888. C. W. Fulton, aged 36 years; married; employed by the Clipper Manufacturing Co., 543 West Sixth street, Cincinnati, Hamilton county. Cause of accident: Bursting of emery-wheel. At what employed: Grinding steel. Number of persons deprived of support in consequence of accident: None. Nature and extent of injury: Hands cut and bruised. How long continuously disabled, expense thereby incurred, loss of time and amount of wages: Cannot say at this date.

General Remarks.—The above-named person was but slightly injured, and his physician informs us he will likely recover the use of his hands in a short time.

CLIPPER MANUFACTURING CO.

June 27, 1888. Henry Gerbig, aged 27 years; single; employed by William Resor & Co., Cincinnati, Hamilton county. Cause of accident: Foot burned by molten iron falling upon it. At what employed: Stove molding. Nature and extent of injury: Toes on left foot severely burned. How long continuously disabled: Six weeks. Expense thereby incurred: Not known. Loss of time and amount of wages: Thirty-three days, \$85.

General Remarks.—The accident was caused by carelessness in wearing boots with holes in them while carrying molten iron.

WILLIAM RESOR & CO.

July 20, 1888. Frank Huntman, aged 14 years; employed by Crane & Breed Manufacturing Co., 685 West Eighth street, Cincinnati, Hamilton county. Cause of accident: Fell through hatchway. At what employed: Trimming white metal. Nature and extent of injury: Broken arm and sprained ankle. How long continuously disabled, expense thereby incurred, loss of time and amount of wages: Cannot report at this time.

General Remarks.—The boy, contrary to rules, rode on elevator to top story during noon hour. While throwing water with other boys, in sport, he opened door of hatchway, supposing elevator to be still there, and, without looking, stepped off.

CRANE & BREED MANUFACTURING CO.

July 24, 1888. Albert Berkight, aged 33 years; married; employed by Cincinnati Coffin Co., Richmond and Carr streets, Cincinnati, Hamilton county. At what employed: Running a double-spindle frizzing machine. Nature and extent of injury: Second

finger of left hand cut off at first joint, thumb cut badly, also first finger; other fingers more or less scratched. How long continuously disabled: Twenty-seven days. Loss of time and amount of wages: Twenty-three and one-half days; about one-half amount of his wages.

General Remarks.—The injured man has entirely recovered, and gone to work to-day (August 20), and the only damage he has sustained is the loss of part of his wages and cost of medical treatment, as the effects from accident will not incapacitate him in the least. He works by the piece, and would have made from \$46 to \$50, but we gave him \$25.

CINCINNATI COFFIN CO.

October 29, 1888. Andrew Rusham, aged 17 years; employed by Peirce & Coleman, 132 Wayne avenue, Dayton, Montgomery county. Cause of accident: Undertook to adjust parts of the machine without stopping same, using wrench, which slipped, and fingers were caught. At what employed: Molding machine. Nature and extent of injury: Loss of fingers of left hand. How long continuously disabled, expense thereby incurred, loss of time and amount of wages: Not able to state at this date (Nov. 2).

PEIRCE & COLEMAN.

Recommendations.

For the greater convenience of members of the Legislature, the recommendations already made in my report are summarized as follows :

1. Recommendations made each year to the Legislature in reference to the power that should be vested in the inspector as to the erection of fire-escapes, giving him power to approve or disapprove, also to place the responsibility of erecting fire-escapes on the owner of the building, and cause him, instead of the tenant, to be held liable for damages resulting from the want of sufficient means of escape in case of fire.

2. Increase of District Inspectors to six, one of whom should be a practical boiler-maker.

3. Increase of clerical help.

4. Inspectors to be empowered to post official notice on cage of elevators prohibiting the use of such, until the necessary repairs are made, under penalty of law ; also compelling owners of elevators to provide them with automatic (self-closing) gates.

5. All Stationary Engineers employed shall have the necessary qualifications to pass a thorough examination before a competent Board of Examiners, also to compel owners of boilers to insure them in some one of the responsible companies transacting business in this or other States.

6. Child-labor law be so changed as to not permit children under *fourteen* years of age to be employed in *workshops, factories, mercantile establishments, telegraph-offices or where goods are sold*. The law now reads *twelve* years of age.

7. Compulsory education.

8. Law in reference to furnishing seats for female employes, be so amended as to permit the use of seats in manufacturing establishments, at all times when such use does not actually and necessarily interfere with the proper discharge of their duties.

Addendum.

MORE ABOUT CHILD-LABOR.

Since writing the introductory to this report, and the putting of the same in type, I have been diligently employed in making additional investigation in the matter of the wholesale shipment of children of a tender age from an Orphan Asylum in Brooklyn, New York, into the State of Ohio, to work in glass factories in Fostoria and Findlay, and I cannot refrain from giving the matter a place in my Fifth Annual Report, together with my views on this very important subject.

The law prohibiting the employment of children under twelve years of age has been strictly enforced since its enactment, but every year it becomes more emphatically apparent that the statutory age should be increased to fourteen years. If the condition of the juvenile laborers in this State was not particularly bad when the law regulating their employment was enacted, and if the evils and extent of their employment were not so glaringly outrageous and far-reaching, it would seem that twelve years was a ridiculously low age to set at which children might be legally employed in factories and workshops. But the fact that the age was made twelve, was adequate proof that there were many children younger than that employed, and their employment had become a disgrace to the State and injurious to its future citizens. If this view of the cause of the enactment be controverted, then there is but one other reason to assign therefor—the legislation was hypocritical and not calculated to be of practical benefit.

However, it has proved beneficial, not only in prohibiting the employment of children under twelve years of age, but in cultivating a sentiment everywhere within our borders in favor of advancing the age to fourteen. During five years of excellent opportunities for observation, I have noticed the growth of public feeling in favor of further restricting the employment of children, and of compelling their regular attendance at school. My official relations and conversations naturally brought me in contact with the most influential class that objected to State interference in the matter—those who, by reason of competition or avarice, resorted to the employment of children in order to obtain the advantage of their cheaper

services. Every one else that gave the subject a thought not only favored the law, but believed in making the statutory age two or three years greater. I can safely say now that among the most ardent advocates of increasing the age to fourteen are the very men who, a few years ago, objected to a restrictive law of any kind concerning child-labor; and there are scarcely a dozen men engaged in manufacturing in the whole State of Ohio who do not favor an amendment making the age at which a child may be employed *fourteen* years instead of *twelve*. This change of sentiment among those who were once opposed to such legislation can be readily accounted for. They have found that the older children do better and more intelligent work; that they are steadier in reporting for duty; that the likelihood of injury from machinery is greatly reduced, and, finally, that there is a sufficient amount of that class of labor above fourteen years to supply all demands.

Again, one of the most productive causes of robbing the cradle and thinning the class-room to fill the factory, is the appeal made to the sympathetic side of an employer's nature. Parents, in order to lighten their own burdens in supporting the family, or to obtain intoxicants, or to avoid the necessity of keeping a watchful eye upon their progeny during the day, or through too much thrift or an ignorant disregard of the advantages of giving their children an education, would plead poverty or offer some other excuse in seeking employment for their young, and were only too often successful in their efforts. Thousands of children are yearly put to work reluctantly by employers because of these appeals. When the law regulates the matter they will point to it as their reason for refusing to employ the children, where before they would yield to the pressure out of weakness or good nature, though feeling at the same time that they were injuring the future prospects of the child without benefiting themselves. And it is the experience of all employers that the appearance of one youngster in a factory is the signal for a general application from hundreds of others, backed by endorsements from older employes, from the foreman down, and by all classes and conditions of thoughtless but more or less influential outsiders.

Another productive cause of child employment is the competitive system of doing business. If a manufacturer in any given industry resorts to that class of labor, many others in the same line will jump to the conclusion that unless they also utilize the little ones, who naturally receive small pay, they will be quickly driven from business by the superior advantages enjoyed by their competitor. When this is not the cause of it, I find that overseers and foremen, in their super-zealous endeavors to *curry favor* in the business office, will "*work in*" a child in place of an adult wherever possible, and thus cut down the amount of the pay-roll and obtain

credit for administrative ability. Of course the introduction of labor-saving machinery has increased the opportunities for utilizing the labor of children, and thus, to a large extent, has reversed the former and natural order of things, by making the child work to support the father, who is deprived of the means of earning a livelihood by the introduction of the machine.

Everything that mechanical ingenuity has done for mankind is an argument in favor of restricting child-labor. When the productive energies of the world have been enhanced a hundred-fold, as has been the case in the last half century, children should be given greater intellectual advantages instead of fewer. Yet we find that nearly every machine is constructed with a view of lessening the number of adults employed and increasing the number of toiling juveniles, and the children not only do not get the benefit of school privileges, but are deprived of nearly every opportunity of becoming skilled in some trade or handicraft.

Legislation *must* step in and regulate these industrial anomalies, and by wise enactments curtail the evils and retain all the growing advantages of a changing system of commerce and manufacture. The most imperative necessity exists for a law prohibiting *all children under fourteen years of age from being employed in mercantile or manufacturing establishments*, and the great State of Ohio should not longer delay the passage of such an act.

While discussing this subject of child-labor, I can not refrain from referring to a phase of it, which recently came to the attention of this department. In the towns of Findlay and Fostoria, great wells of natural gas have lately been discovered, and have attracted, by reason of the cheapness of fuel, a great many new industries to those places. Among others a number of factories for the manufacture of glass have been established there, and the demand for child-labor in the vicinity having absorbed about all the little ones in the district, the operators of these glass factories found themselves obliged to hire men to do work which might be performed by boys, could they be obtained. I suppose the owners of these factories desired to obtain the full benefit of the economical gas wells, so they cast about them to find a supply of children to work in their factories. Not being able to make suitable terms with individuals or institutions in this State, they went to Brooklyn, N. Y., and contracted with the authorities of St. John's Orphan Asylum, situated on the corner of St. Mark's and Albany avenues, in that city. About thirty boys were first obtained from this asylum and brought to Fostoria, where, I have been informed, they were housed in a body and taken charge of by a couple of women said to be members of the religious order which controlled the asylum from whence the boys came. The innovation was so remarkable that the matter was quickly called to my attention, and I therefore commenced an investigation into the facts. At my request the Factory Department of the State of

New York instructed one of its officers to inquire into the circumstances surrounding the exportation of these orphans into this State by droves under contract and marshaled by persons assuming authority over them. In a short time I received the following reply :

STATE OF NEW YORK, OFFICE OF FACTORY INSPECTOR,
ALBANY, November 21, 1888.

Hon. Henry Dorn, Chief Inspector, etc., Columbus, O.:

DEAR SIR: Your communication and marked paper concerning the exportation of orphan children from Brooklyn, N. Y., to Fostoria and Findlay, Ohio, there to work in glass factories, were duly received and their subject matter referred to Deputy Factory Inspector Jordan, of Brooklyn, for investigation. After carefully investigating he writes to this office, as follows, under date of 20th inst.:

"On the 20th day of September there were sent from St. John's Home, the R. C. Asylum, on the corner of Albany street and St. Mark's avenue, thirty-one boys to Fostoria, Ohio, to work in a glass factory there, of which Mr. Dalzell is partner.

"There was another lot, numbering thirty, to leave yesterday (the 19th), twenty-five of whom I saw while visiting the institution. They were going to Findlay, Ohio, to work in a glass factory. I was assured that none of them were under twelve years of age. They are contracted for one year, the proprietors of the glass works agreeing to board and clothe them for the first six months, and during the next six months they are to be paid one dollar per week each additional.

"The move is a new one, and if successful will be continued unless prevented by law.

"I learn that during the year which they are bound out the children are to be boarded in a home under the supervision of Sisters of the same society managing the asylum here.

"Of the boys I saw who were to go to Findlay, I should certainly doubt that some of them were of the required age if I met them in a factory. They were delicate and dwarfed in appearance.

"Feeling satisfied that this is a subject of importance, and one that will create considerable discussion, I think it would be wise to obtain all the information possible as to the amount of work and other conditions required of the children, and the manner in which they are used while at work."

This is all the information we have been able to gather on this subject, but if we can assist you any further in the matter we will be glad to do so.

Respectfully yours,

JOHN FRANEY,
Assistant Factory Inspector.

The Factory Inspectors of New York, seeing the importance of this startling phase of the child-labor problem, and hoping that by calling public attention to the subject, that the wholesale delivery to slavery of defenseless orphans would be stopped, gave copies of the correspondence to the press. Considerable newspaper discussion followed, and in the defense of themselves and the glass factory owners, the following appeared in print:

[From New York Journal, November 28, 1888.]

A gang of little white slave-boys were shipped from St. John's Asylum, in Brooklyn, to glass factories in Ohio last Monday.

Their ages ranged from eleven to fourteen, and there were three or four "*big boys*," said to be a year or two older than the average of their companions in bonded servitude. All of them went out under a year's contract.

This is the second shipment of its kind within the last couple of months from this charitable institution. Whether the experiment will stop right there appears to be a matter that Hon. Henry Dorn, Chief Inspector of Factories in Ohio, has set his mind on ascertaining, and after inquiry into the circumstances, Inspector Franey, of this State, has just forwarded a document showing how this child-labor export from public institutions, for the enrichment of unscrupulous factory barons, is flourishing.

The reporter gathered the following facts directly from Mother De Chantel, of St. John's Home, yesterday, in the course of a long conversation about the new method adopted by the Home to "*place*" the children when they have reached the age of twelve.

Being asked whether the factory owners had given any guarantee that the children would be properly fed and lodged and protected against overwork, Mother De Chantel replied:

"Well, we have only their word that they will live up to the agreement, but I have every reason to believe they are conscientious men. As regards the hours of labor, the laws of Ohio are very strict. No child is allowed to be employed more than ten hours a day."

"But do you know by personal observation how long these little children really work?"

"Yes. I went to Fostoria, Ohio, myself with the first lot we shipped in September. They are working for the Nickel-Plate Glass Company. Those who left here last Monday went to the firm of Dalzell, Leighton, Gilmore & Co., at Findlay. I have been in the works at both places. The boys are employed in two shifts of five hours each. That is, they begin work, for instance, at 7 A. M., and work on a stretch till noon. Another shift goes on, and at 5 P. M. the morning gang start in again and work till 10 P. M."

"How does such drudgery agree with the children?" queried the reporter.

"We have had no complaints so far," was the non-committal answer.

"And do you know how the little ones are lodged?"

"There are two frame houses right near to the glass factory, where they are under competent supervision," declared the Sister of Charity.

"What about the wages they are said to receive, after having worked six months for food and lodging simply? Is the money placed to the credit of the little fellows?"

"Not altogether. Our institution receives three dollars per month out of the wages of each child, and the remaining dollar he may keep for himself. We furnish them, as they leave the Home, with two outfits, and three-fourths of their wages go toward meeting the expenses we have incurred for clothing, and so on."

Kindly consenting to show the sort of outfits that Mother De Chantel valued at thirty dollars, she led the reporter to the tailoring-room, where all the clothing is made by the inmates of the institution without incurring any expense for labor. Some of the suits were produced. Very few stores carry so cheap a grade of clothing in their stock, but the expense of the material could certainly not average more than two dollars per suit.

Subsequently the reporter passed into the big dining hall, where 600 little boys were seated in penitentiary position at long, narrow tables "*enjoying*" their supper, consisting of a cup of tea and two slices of bread, without butter, for each boy.

The puny looks of the children were so striking that the reporter's thoughts naturally reverted to the declaration of Inspector Jordan, that they were "delicate and

dwarfish." Mother De Chantel would not dispute the fact, but she explained that coming from destitute parents, one could hardly expect a good stock.

From this sickly, mentally and physically dwarfed crowd of children the *glass factories in Ohio* draft their ill-paid slaves.

[From New York Journal, Nov. 26, 1888.]

The slave trade in asylum children, as revealed by the shipment of a hundred or more tender-aged boys from the Brooklyn St. John's Home to the glass factories of Northwestern Ohio, may prod county and State authorities to make a thorough investigation of the manner in which private institutions dispose of their little wards.

And from the few facts of this child-trading system that have come to the surface so far, there is a strong reason to suspect that not only the management of the St. John's Home are guilty of this outrage upon the most elementary of humane principles, but that other asylums, including the organization known as the Children's Aid Society, are making a practice of virtually selling the poor waifs of this great city and those of its sister community across the river, to the highest bidder, regardless of how they may fare in the hands of their new owners.

Independently, however, of the general inhumanity of surrendering a large number of puny children who ought to be at school, to the tender mercies of irresponsible employers, foremen and boarding-house masters in a far distant State, the purely legal question, whether the St. John's Home management have not violated the laws of the State of New York by their last week's wholesale export of child-labor, will first of all be considered by the Charities Commissioners of Kings County and the Bureau of Factory Inspection.

Secretary D. C. Toal, of the Charities Commissioners, who for some time directed his attention to abuses of this kind, and particularly to the selling of asylum boys to Western farmers, yesterday expressed his warm approbation of the Journal's stand in the matter.

Explaining the circumstances under which the Charities Department commit wards to the several religious institutions, Mr. Toal asserted that in case there were any of the public wards committed to the St. John's Home among the child-slaves now drudging away their wee lives in the glass factories of Findlay and Fostoria, they would certainly be reclaimed, and that at very short notice.

"As the law declares," he went on, "that a child over two years old cannot be maintained in a public poorhouse in this State, we send such pauper children to the different institutions and asylums, in accordance with the religious denomination of the parents, and there they are maintained as county wards until they reach the age of sixteen, provided a home is not found for them in the meantime.

"As long as such a child remains in the institution our department pays for its support at the rate of twenty-five cents per day. We have authority over the children till they reach sixteen years, and no one has a right to remove them out of the jurisdiction of New York State—a provision made by a law of 1875."

"Are you not informed, then, as soon as these asylums find what they call a 'home' for any child they have received from the Charities Department?" queried the reporter.

"Not before the end of the month, when they send in their bills, accompanied by a schedule of 'discharged' children. Owing to this system I can't yet tell whether any of our wards have gone to Ohio. But as soon as the statement comes I shall give it a very careful scrutiny.

"While institutions like St. John's Home have the privilege to find homes for the children placed in the care of Sisters, we reserve the right to see that the 'homes' shall not be slave-pens. And I certainly refuse to consider a shanty next to the Findlay glass factories, with shifts of ten hours' work for twelve-year-old boys, as a home, even in the poorest sense of the word.

"I understand, furthermore, that Mother Superior De Chantel has refused to give the names of the slave-bound children for publication, on the ground that their where-

abouts should be kept a secret to their parents or other relatives. Well, that principle ought to be sharply condemned. My experience in this department teaches that while the parents who surrender their children are destitute at the time, their conditions may often improve for the better after awhile.

"They would be glad to get their little ones back, but, applying to the institutions, they are perfunctorily informed that the child has been shipped out West, and its very identity destroyed by a change of name. This actually amounts to *kidnapping*. A thorough investigation of these abuses of authority would come none too soon."

[From Brooklyn Citizen, November 23, 1888.]

Through the investigations of Deputy Factory Inspector John Jordan, of this city, it has transpired that the St. John's Home has been sending the orphans in its charge to Fostoria and Findlay, Ohio, to work in the glass factories in those two places. On September 20, thirty-one boys were shipped from this city.

The proprietors of the factories had written for them, and agreed to board and clothe them for the first six months, and pay \$1 a week in addition for the next six months. The contract, for it can be called nothing else, is to remain in force one year. On Monday thirty more were sent under the same agreement. Deputy Inspector Jordan saw twenty-five of them before they left the city, and he said that several of them were under twelve years of age. They were delicate and dwarfed in appearance. The work which the children are required to do is considered unhealthful and dangerous.

Other asylums in the city are suspected of the same practices, and their methods of disposing of the children in their charge is being investigated.

Secretary Toal, of the Charities Commissioners, told the reporter that it was no uncommon thing to ship the orphans of this city to the west. "During the past forty years not less than 200,000 have been sent into the Western States," said he. "Many of them have been sold *outright*. The managers of the asylums would ask the farmers what they would give for a boy until he was 21 years old. When they got a satisfactory price, the boy was sold and his name changed. He might have been known as Patrick Maguire when he left Brooklyn, but when he reached his new master he was called John Brown, or some similar name. The girls are sent out in the same way. There are cases on record where brothers and sisters have been separated, their names changed, and sold to farmers living within twenty or thirty miles of each other. A few years after, when they had grown up, they have met, and, unconscious of the kinship, have been married. After marriage they have learned, to their horror, that they were children of the same parents."

Superintendent B. J. Wilkins, of the Society for the Prevention of Cruelty to Children, said to the reporter in regard to the case:

"From the facts which I have learned I should say that there was a contract for the boys to all intents and purposes. As I am opposed to all *contract labor*, I do not believe in sending children out in this way.

"When the children are sent out, as in this case, is not the asylum responsible for the injury if the work is dangerous?" asked the reporter.

"I suppose it is," said Mr. Wilkins; "but only a civil action could be brought against it. I have been told that the Ohio State law was violated by the employment of these Brooklyn orphans in that State."

From the facts contained in the foregoing, it became evident that this State might become the dumping ground of the eleemosynary and other juvenile institutions of neighboring commonwealths, if the experiment started by these Findlay and Fostoria glass factories be successful. I believe that this is neither desired nor likely to be beneficial to the State or to the

children immediately concerned, and the only beneficiaries would be the glass factory owners.

"History repeats itself," and the incipient movement herewith chronicled had its counterpart in the days of Elizabeth of England, when cotton and woollen manufacturing machinery was first introduced. Then, too, the massing together suddenly of immense milling interests made it desirable for the manufacturers to contract with the charitable institutions of Great Britain for such children as were available, from the fact that they were fatherless and friendless. The Findlay and Fostoria glass factories are but copying this ancient precedent. But it was the evils which grew out of the infant slave system that forced the enactment of the present broad and beneficent factory laws of the British government; and perhaps the abominable revelations in connection with the purchase and thralldom of the Brooklyn orphans may serve to hereafter prevent the disgraceful state of affairs brought to public attention by the action of the glass factory philanthropists of this State.

Further comment is unnecessary, but the fair fame of Ohio will be *forever* tarnished if prompt legislation does not in the future prohibit the establishment of pens of bondage for the waifs of the world.

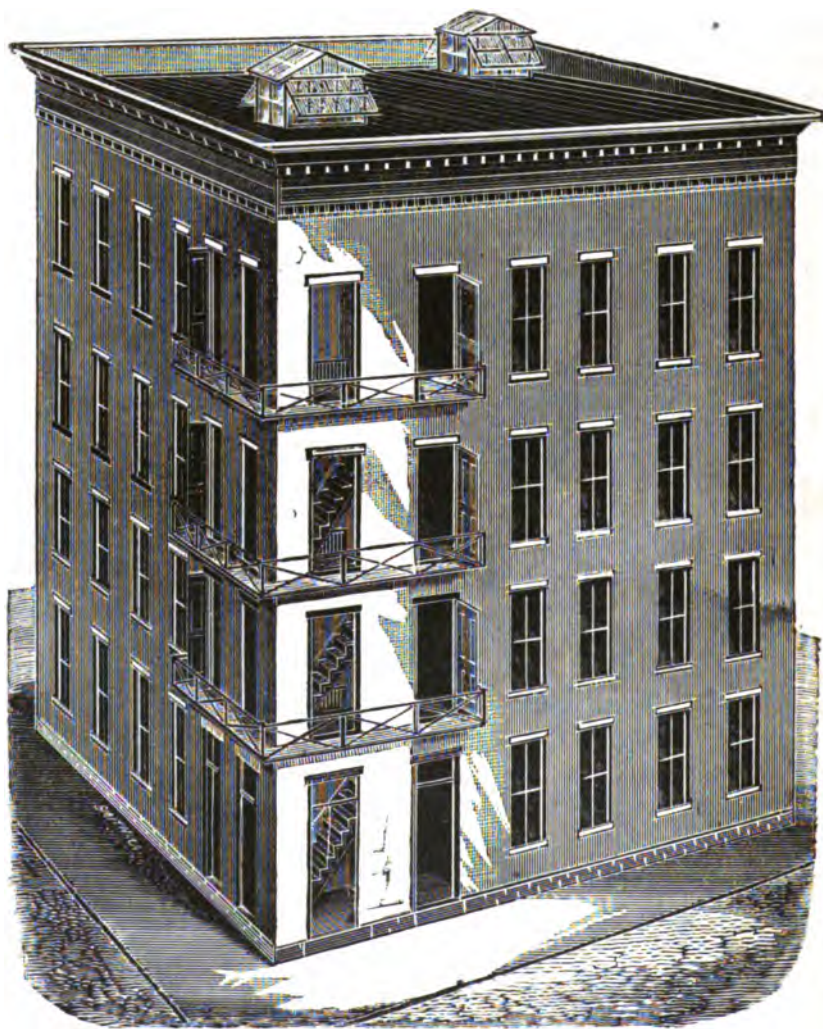
The pretense that the children learn trades in the glass factories is unworthy of credence. The children brought to the Findlay and Fostoria factories could not learn the business of glass-blowing if the proprietors so desired, which they do not. The glass workers' organization controls the internal government of these workshops, and by its rules prohibit any but the sons of glass-blowers from learning the trade, and even limits the number of apprentices then. These orphan boys are not considered apprentices. They "knock off" the rough edges of bottles while heated and carry them to the trimming tables. It is hot and tedious work. These boys, as fast as they grow up, will be turned loose without the first rudiments of a trade, and younger ones put in their places. The fact that they must begin at 7 o'clock in the morning and work until 10 o'clock at night, is evidence that the work is such that independent, home-loving boys who live with their parents will not do. True, they are said to have five hours in the afternoon to rest, but that is more detrimental than beneficial to them.

It is to be hoped that my efforts to prevent innocent children of tender age from being driven into the workshops and factories of our great State like cattle into the slaughter-pen, will find recognition in the law-makers of Ohio, and that immediate steps will be taken to enact such laws as will strengthen the arm of the Inspector of Workshops and Factories, and give him full control and power to not alone prevent our *own* children from being employed in workshops under the age of *fourteen* years, but also

empower him to employ such measures as will stop the wholesale shipment of innocent orphan children from other States into the State of Ohio.

The defects in the child-labor laws of this State are undergoing great criticism by the people of Ohio, and particularly in the district so recently invaded by the importation from the "East," and they are patiently waiting to see what weight public sentiment will have upon the General Assembly, who alone can remedy the evil by enacting such laws as will place our State on an equal footing with Massachusetts, New York, New Jersey and other States having good and wholesome child-labor laws, thus affording the protection asked for and so justly deserved.

INSIDE IRON STAIRWAY FIRE-ESCAPE.



A full description of the above cut will be found on page 22.

APPENDIX.

SECOND ANNUAL CONVENTION

OF

National Association of Factory Inspectors

OF

NORTH AMERICA,

HELD AT

BOSTON, AUGUST 8-10, 1888.

FACTORY INSPECTORS.

RUFUS R. WADE, <i>Chief</i> ,	-	-	-	-	-	Boston, Mass.
L. T. FELL, <i>Chief</i> ,	-	-	-	-	-	Orange, N. J.
HENRY DORN, <i>Chief</i> ,	-	-	-	-	-	Columbus, Ohio.
JAMES CONNOLLY, <i>Chief</i> ,	-	-	-	-	-	Albany, N. Y.
JOHN FRANEY, <i>Assistant Chief</i> ,	-	-	-	-	-	Buffalo, N. Y.
HENRY CLAYMIER,	-	-	-	-	-	Milwaukee, Wis.
JAMES C. MOORE,	-	-	-	-	-	Janesville, Wis.
W. P. KELLEY,	-	-	-	-	-	Hartford, Conn.
L. R. CAMPBELL, <i>Deputy Com'r of Labor</i> ,	-	-	-	-	-	Rockland, Me.
JOSIAH B. BOWDITCH, <i>Com'r of Labor Statistics</i> ,	-	-	-	-	-	Providence, R. I.
JOHN H. DAVIS, <i>Chief Clerk</i> ,	-	-	-	-	-	Providence, R. I.

OFFICERS.

RUFUS R. WADE,	-	-	-	-	-	President.
L. T. FELL,	-	-	-	-	-	First Vice-President.
JOHN FRANEY,	-	-	-	-	-	Second Vice-President.
HENRY DORN,	-	-	-	-	-	Secretary-Treasurer.
L. R. CAMPBELL,	-	-	-	-	-	Assistant Secretary.

ORDER OF BUSINESS.

Roll-call of Officers.
Reading of Minutes.
Reports of Committees.
Unfinished Business.
New Business.
Election of Officers.

PREFATORY.

The importance of bringing together the Factory Inspectors of the different States has long been recognized. The benefits that would likely accrue from a conference of those whose duties involve such vast consequences to community were manifest. The laws on the subject of inspection in the various States are so different as scarcely to be recognizable as bearing upon the same general subject. To produce something like uniformity, both in the laws and in the practice of the inspectors, was deemed desirable, and this could only be effected by an interchange of views and a comparison of the statutes under which each inspector acted. To accomplish so laudable a purpose, Mr. Henry Dorn, Chief Inspector of Workshops and Factories of Ohio, opened a correspondence during the year 1886, with the Inspectors of other States, with the view of bringing about a meeting at as early a date as practicable. This, of course, consumed considerable time. Each Inspector entertained views peculiar to himself on the subject, and these conflicting ideas had to be harmonized.

But Mr. Dorn persevered in his efforts, and finally succeeded. The first National Convention of State Factory Inspectors was held in the city of Philadelphia on the 8th and 9th of June, 1887, where the use of the Common Council chamber was tendered for its meetings. The wisdom and foresight that suggested the movement was manifest to the members.

At the first Convention five States (Massachusetts being the first), New Jersey, Ohio, New York and Wisconsin, had established Factory-Inspection departments. Connecticut was represented by the State Board of Education.

At the close of their deliberations, a permanent organization was effected and arrangements made for annual meetings thereafter. These annual meetings will, no doubt, grow in importance and interest each year, and it is confidently believed will result in incalculable benefit to all concerned, to the employer as well as the employe, and to the public at large. The Convention then adjourned to meet in Boston, as the guests of Massachusetts Inspectors, in August, 1888.

In accordance with the above arrangement, the second annual Convention met in the city of Boston on the 8th, 9th and 10th of August, 1888, and was there tendered the use of the Common Council chamber in which to hold its meetings.

Since the adjournment of the first Convention, two additional Inspection departments had been created, one in the State of Connecticut and one in Maine. The State of Rhode Island was represented by the Commissioner of Labor Statistics and his chief clerk, whose duties are to report the condition of workshops and factories to the Legislature, but they are not clothed with the power to enforce compliance with such changes as may be ordered by them, as inspectors of other States. The whole number of Factory-Inspection departments were then eight, of which seven were represented in the Convention.

After three days' deliberations, during which time a number of instructive speeches, in regard to factory and industrial laws, were delivered by some of the delegates, as well as by Hon. Carroll D. Wright, Commissioner of National Bureau of Labor Statistics, an invitation was accepted, and the mills of Lowell were visited by the delegates.

The proceedings of this Convention are herewith presented, together with important papers read during the session.

HENRY DORN,
Secretary-Treasurer.

PROCEEDINGS.

BOSTON, WEDNESDAY, *August 8, 1888.*

The second annual Convention of the National Association of Factory Inspectors of North America convened in the Common Council chamber at 10:45 A. M., with President Rufus R. Wade, Chief Inspector of Massachusetts, in the chair, and Henry Dorn, Chief Inspector of Ohio, at the Secretary's desk.

The roll was called, and the following delegates answered to their names :

Massachusetts—Rufus R. Wade, chief; John T. White, Jos. M. Dyson, S. C. Hunt, J. H. L. Coon, E. Y. Brown, J. A. Moore, H. A. Dexter, W. S. Buxton, J. H. Chadwick, A. J. Cheney, F. A. Osgood, Lemuel Pope, Isaac S. Mullen.

New Jersey—L. T. Fell, chief; G. P. Hall, John D'Arcy, P. Callan, E. R. White.

Ohio—Henry Dorn, chief; Wm. Z. McDonald, John H. Ellis.

New York—John Franey, assistant chief; George Schaubert, Hiram Blanchard, Francis U. Coe.

Connecticut—W. P. Kelley.

Main—L. R. Campbell.

Rhode Island—Josiah Bowditch, John H. Davis.

Following were the absentees :

New York—James Connolly, chief; John Jordan, George A. McKay, James P. Hooley, George L. Guetig, Johnson Beers.

Ohio—James A. Armstrong.

Wisconsin—Henry Claymier, James C. Moore.

President Wade, in a few well chosen words, introduced to the Convention his honor, Mayor O'Brien, of Boston, who welcomed the delegates to the city in a manner worthy of praise.

President Wade then delivered the following address :

GENTLEMEN OF THE CONVENTION: A little more than a year ago the State Factory Inspectors held their first annual Convention in the hospitable city of Philadelphia. At that time you did me the honor, which I greatly appreciated, of choosing me as the President of the Convention. And I am happy to greet you again to-day as we assemble in our second annual gathering to exchange experiences of our common work, to note

the progress which has been made in our respective fields of labor, and to derive such encouragement as we may from the interchanging of ideas.

In a certain broad sense, our chief duty as factory inspectors is to enforce the laws whose execution is expressly entrusted to us. We are not responsible for the wisdom of those laws, nor the particular methods which the law-making power designate for their enforcement. We are expected, to be sure, to exercise common sense in our intercourse with those whom we have to deal in our work of inspection. It is not wise to exert authority in an arbitrary, unreasonable and offensive manner. We are not to assume that every slight and technical violation of the laws relating to factory inspection must be dealt with as if the offender was a willful wrong-doer. A little discretion and patience do not injure the real interests committed to our care, but often result beneficially in securing the confidence and respect of those who, from inattention or ignorance, have brought themselves within the reach of the law.

But while it is true that to us, as State Factory Inspectors, is committed the duty of strictly enforcing certain laws, and equally true that we are not to be held responsible for those laws, either in scope or in their effect upon the general welfare, we do not conceal the fact that legislators depend upon us for such facts and suggestions as our peculiar experience furnish to aid them in procuring proper statutes.

Under our republican institutions effective laws are based upon an intelligent public sentiment. Laws grow out of public necessity; they are sustained by public opinion, or they fall into disuse and contempt.

Our experience in Massachusetts, I presume, is not singular. The most important labor reforms have been the subjects of earnest and protracted discussion in the newspapers, in public assemblies, in workshops and factories, and wherever bright and capable thinkers have been able to make their ideas and desires known to those who formulate opinions and statutes. Thus, year after year, the ten-hour law, so-called, was considered and debated. Petitions, numerous signed, began to be presented to the Legislature, praying that the hours of labor of factory operatives might be materially shortened.

The subject got into politics, as every live subject generally does, and caucuses and conventions took up the matter in earnest. And this was the history of the agitation for a number of years, until the time came when the great change could be no longer postponed. Once committed to the policy of ameliorating the condition of the wage-earners, the Commonwealth within whose borders we are now assembled has never taken a backward step. She has done nothing rashly, nor has she been quick to enter upon experiments in legislation in behalf of her operative classes.

In the first address which I had the honor of making to this Convention, I took the liberty of giving an outline of the legislation of our Commonwealth in relation to our industrial population. The Legislature of the present year gave careful consideration to the various matters deemed essential to the perfecting of our labor laws.

It will not be expected that I should consume your time in presenting details, although they might possess more than local interest. Let me therefore present, as briefly as possible, a sketch of some of the changes made in our laws during the current year: First, a law was passed to regulate the erection and construction of public buildings, public or private institutions, school-houses, churches, theatres, public halls, places of public resort, structures of more than two stories in height whose upper stories are designed to be used in whole or in part as a factory, workshop, mercantile or other establishment, and having accommodations above such second story for ten or more employes, buildings more than two stories in height, designed to be used above the second story in whole or in part as a hotel, family hotel, apartment-house, boarding-house, lodging-house, or tenement-house, and having ten or more rooms above said story.

No such building or structure shall hereafter be erected until a copy of the plans be filed with the District Inspector of Factories and Public Buildings, whose certificate endorsed shall be required to show that sufficient ways of egress, and other means of

escape from fire, properly located and constructed, have been provided. The inspector may require that proper fire-stops shall be provided in the floors, walls and portions of such buildings, and may make such further requirements as may be necessary or proper to prevent the spread of fire therein, or its communication from any steam boiler or heating apparatus.

The courts, at the instance of the inspector, may issue a temporary injunction or restraining order, enjoining the erection of such building. An important revision and amendment of the law in relation to the employment of children has also been made by our Legislature during the current year. The most stringent provisions have been made to secure the mental training of minors employed in in-door work, to extend the limit of age within which no such child shall be employed in any factory, workshop or mercantile establishment in this Commonwealth, and to guard against such evasions that have been practiced in respect to the age and school attendance of minors so employed.

The attention of our Legislature was early called to the subject of way of egress and means of escape from fire in certain buildings of public resort, and experience having shown the necessity of further protection, additional legislation has been enacted. These provisions apply to churches, schools, theatres, public buildings, hotels, family hotels, apartments and boarding-houses, lodging and tenement-houses, in which ten or more persons lodge or reside above the second story. There must be more than one way of egress by stairways on the inside or outside of buildings, placed as near as practicable in the opposite ends of every room above the second story in every such building. Women or children shall not be employed in a factory, workshop, mercantile or other establishment, in a room above the second story, from which there is only one way of egress, if the inspector shall so direct in writing.

One of the most valuable features of the new law is that which provides that prosceniums or curtain openings of all theatres shall have a fire-resisting curtain of some incombustible material, and such curtain shall be properly constructed, and shall be operated by proper mechanism.

I have not time to enumerate the various sections of this law nor to discuss them in detail. An addition was made by our last Legislature of ten members of the inspection department of the district police force, qualified to perform the duties of the members of such department. The constant enlargement of the work of our force in this State amply justifies this increase of our numbers.

It is a noticeable fact that the legislation in favor of industrial workers in our State has been the logical outgrowth of scientific knowledge applied to practical experience. It has been clearly demonstrated that allowing all other conditions to be substantially the same, there was a limit of time to human endurance in labor, which, if exceeded, would be not only disastrous to the operative, but unprofitable to the mill owner. Twelve to fourteen hours of work daily, for six successive days, had seemed to be not unreasonable until the subject began to be examined in its economic as well as its moral bearings. Had not men, and even women and children, wrought thus continuously for a generation or more?

But when it was shown that a reduction of the hours of labor meant better results, both as to the amount of production and quality of it, the question of shorter hours was in a fair way to settlement. Thus came about the laws restricting the hours of labor in manufacturing establishments.

Successive steps followed in the same general direction until attention began to be called to the sanitary conditions of the factories and workshops. And now we have statutes, whose enforcement is entrusted to our Massachusetts District Police, which relate to proper sanitary provisions in factories and workshops, and also proper ventilation in public buildings and school-houses. These acts are broad enough to cover the subject of drains, privies, and such sources of air pollution as medical science has shown to be important in reference to health and life.

The laws of our Commonwealth which are intended to protect the rights of her industrial classes are now as complete as those of any other civilized community.

An experience may show the need of their amendment. We are reasonably sure that such changes will be made. As a whole, our people are contented, prosperous, and happy; ambitious to excel in chosen pursuits, so that leadership therein may be possible is not unusual among our laborers. And why should it not be so? The man who toils at the direction of another, may, in the near future, be himself the employer. All avenues to distinction in every walk of life are, like the king's highway, open and free to all travelers. Under our republican institutions the possibilities of advancement are practically without limit. After all, it is this which prevents transient discontent from becoming revolutionary and destructive. We have no legalized privileged classes. The people formed the government and they are the government.

In Massachusetts we have been free from the savage onslaught upon life and property which have afflicted other communities. We have chronic croakers about the encroachments of capital upon labor, but the intelligent, industrious laborer knows that his labor may become more valuable as it becomes more skilled, and thus it rests with himself, to some extent, whether he shall improve his condition and become himself a capitalist. We have a few imported agitators who have fled from the grinding despotisms of Europe to this free land, who only show their appreciation of the change by howling for the overthrow of our institutions. The gate of immigration, through which these ignorant fanatics came to us, swings both ways, and unless they can behave like good citizens they cannot too soon return to their native shores.

If there are evils in American society and American laws and institutions, we have American methods of correcting them, and dynamite has no mission as a labor reformer among us.

We fail to recognize the wisdom of burning a barn to get rid of a rat.

That man is an enemy to his race who teaches that there is an irrepressible antagonism and hatred between capital and labor. That there are always inequalities to be adjusted, grievances to be remedied, conditions to be modified, all sensible observers know.

The imperfections of human nature attach to human life in all its phases. There are seasons when labor is ill-paid, but there are seasons of depression when overproduction has glutted the market and prices have fallen, or when the supply of labor has exceeded the demand. No machinery made by the hand of man is so complicated, finely adjusted and yet liable to get out of order as that vast machinery which we call human society. No sensible man corrects the movements of a chronometer by prying it apart with a crowbar or smashing it with a hammer, and the inevitable friction, the erratic movements which disturb the affairs of men, creating discontent, and too often suffering and misery, are not proofs that society ought to be revolutionized. Destructive violence is no remedy for evils that the industrial classes suffer. If these evils can be removed by legislation, it may be asked whose fault it is if they are not abolished. No legislative body in our land ventures long to defy the well-settled convictions of a majority of its constituents.

Gentlemen, you came to Massachusetts at a propitious time; our soil does not produce the variety and extent of natural products which other States can furnish, yet we can hardly say, as a New Hampshire orator once said, that our only productions are granite and ice. We are largely interested, as you know, in manufactures. Our shops and factories are hives of busy industry. Our business men are thrifty and enterprising. Our educational and charitable institutions have an honorable record. Our churches and school-houses abound in all our centers of population. Our lines of railroads reach in all directions, and our capital has caused distant sections of our country to blossom as the rose. Our houses are the habitations of people who are proud of our country and attached to her institutions, and this love of order and law, of liberty and learning, of charity and religion, are not only the chief glory of our Commonwealth, but the highest inheritance of our descendants. The higher the grade of intelligence among the people, the purer the morals which prevail; the more exalted, the aspirations of our citizens the

easier will be the task of those to whom such a community has committed the trust and duty of government. May generations yet wiser and better take our places, control the destinies of our country, and make it a grander and more glorious arena in which to strive for all that makes life worth living.

On motion of Mr. Dyson, of Massachusetts, the invitation of Mayor O'Brien, to visit the harbor and public institutions, was accepted, and a committee appointed, consisting of Massachusetts inspectors, to confer with his honor on the proposed trip down the harbor.

Secretary Dorn, of Ohio, read the following letters from the leading corporations of Lowell and the Manufacturers' Board of Trade of Fall River, inviting the inspectors to visit their several industrial establishments, which were accepted:

LOWELL, MASS., July 31, 1888.

RUFUS R. WADE, Esq., *President National Association Factory Inspectors, Boston, Mass.:*

DEAR SIR: The undersigned, representing the manufacturing corporations of Lowell, Mass., learning that your association will hold a National Convention of Factory Inspectors in Boston on the 8th of August, prox., would respectfully and cordially invite you to visit Lowell at that time and view our various establishments and industries.

Trusting that you will favorably consider this invitation, and that we may be able to extend to your body the courtesies of our several establishments, we remain,

Yours very truly,

FRANK F. BATTLES, Ag't Massachusetts Cotton Mills.
O. H. PERRY, Ag't Middlesex Company.
O. H. MOULTON, Sup't Hamilton Manufacturing Co.
ALVIN S. LYON, Sup't Lowell Co.
WM. H. McDAVITT, Sup't Appleton Co.
EDWARD W. THOMAS, Ag't Fremont and Suffolk Mills.
JOHN KILBURN, Ag't Lawrence Manufacturing Co.

MANUFACTURERS' BOARD OF TRADE,

FALL RIVER, August 6, 1888.

RUFUS R. WADE, Esq., *Chief of District Police, Boston, Mass.:*

DEAR SIR: Our Board desire me to extend an invitation to yourself and staff to pay our city a visit and examine our industries. If it will be convenient and agreeable for you to do so, you will please name date of visit, and number that will be likely to come with you; also, time of arrival, that we may have carriages at train. We trust this will be favorably received and accepted. Awaiting your reply, we remain,

Very truly yours,

C. C. REMVILLE, *Secretary.*

Mr. Franey, of New York, was called upon to explain the inspection laws of his State, which he did in a very creditable manner.

On motion, Mr. Coon, of Massachusetts, was appointed Assistant Secretary.

On motion, the following committee was appointed to draft rules and regulations for the guidance of the annual conventions of the Association: P. Callan, of New Jersey; John T. White, of Massachusetts; Hiram Blanchard, of New York.

By request of the committee, Secretary Dorn, of Ohio, was added to their number.

The Convention then adjourned till 2 o'clock P. M.

AFTERNOON SESSION.

The Convention [met at the appointed hour, President Wade in the chair.

The President stated that the trip to Lowell would be made on Thursday morning at 8:30, and returning, a visit would be paid Lieutenant Governor Brackett, at the capitol, after which the delegates would take the steamer and visit the harbor and Deer Island.

On motion, the invitation of Manufacturers' Board of Trade of Fall River, to visit industries, was canceled for lack of time, and the thanks of the Convention returned for the proffered hospitality.

Secretary Dorn, of Ohio, then read his annual report, as follows:

Since the adjournment of the first National Convention of Factory Inspectors, held June 8 and 9, 1887, the States of Connecticut and Maine have each created the office of Factory Inspector. Mr. William P. Kelley, of Killingly, was appointed Factory Inspector of Connecticut June 27, 1887, and Mr. Leonard R. Campbell, of Rockland, was appointed Deputy Labor Commissioner of Maine July 8, 1887. The duties of the latter are similar to those of Factory Inspector, and consequently entitles that official to identification with this organization.

The State of Wisconsin has increased the number of inspectors to two, and the State of New York to ten, since the adjournment of our last Convention.

In regard to the printing of the proceedings of the first annual Convention, an immense amount of unnecessary work was caused through the delay of some of my brother inspectors in failing to answer my letters promptly, in many cases requiring several letters to be written before an answer could be obtained, thus delaying settlement with the Secretary for money advanced for printing until late in October or November.

Fifteen hundred copies of the proceedings were printed and distributed, as follows: New Jersey, 500; New York, 100; Massachusetts, 200; Maine, 100; Connecticut, 30; Wisconsin, 50; Ohio, 520 copies, at a cost of \$157.50. The amount paid for boxing and expressing proceedings was \$5.51. Badges were also furnished delegates, to be worn during the Convention, at a cost of \$8, making a total expended of \$171.01.

While the office of Secretary may not be considered a laborious one, yet, to further the interests of the Association, a great deal of correspondence has been carried on during the last two years at the expense of that officer—stationery, postage, expressage, telegraphing and other contingencies incidental to such office—and as no rule governing the same has, as yet, been adopted, other than a motion by Mr. Jennings, of Connecticut, that everything relating to the expense of printing, general management, etc., be referred to a committee composed of the Chief Inspectors of the different States represented, your Secretary feels a delicacy in presenting a bill for such contingencies, and will therefore leave the matter to the wise judgment of the delegates of the Convention.

The Committee on Rules and Regulations made the following report, which was adopted:

1. The Chief and Assistant Inspectors of workshops and factories, and any other duly appointed State officer, a part of whose duty it is to perform such inspection, shall constitute a National Association of Factory Inspectors of North America.

2. The officers of said Association shall consist of a President, two Vice-Presidents, a Secretary-Treasurer, and an Assistant Secretary, who shall be chosen by ballot at each annual Convention.

3. The time and place of holding the annual session of the Association shall be subject to the call of the President.

4. The proceedings of each session of the Convention shall be printed under the direction of the Secretary, and published in pamphlet form, and each State department shall be supplied with copies at cost.

5. The Secretary shall annually collect from each department the sum of five dollars (\$5), or as much more as he may find necessary, for incidental expenses, in the proper discharge of his duties as Secretary.

The following telegram was received and read in regard to the health of Chief Connolly, of New York :

ALBANY, N. Y., *August 8, 1888.*

To MR. JOHN FRANEY, *Assistant Factory Inspector, Young's Hotel, Boston :*

Mr. Connolly has been confined to his room all week, and is not in condition to attend the Convention. He regrets exceedingly to be absent, and sends regards to members of the Factory Inspectors' Association.

WM. H. BUCKLEY, *Clerk.*

The following letters of regret were read :

BUREAU OF LABOR AND INDUSTRIAL STATISTICS,

JANESVILLE, WIS., *July 11, 1888.*

Hon. HENRY DORN :

DEAR SIR: Your favor of 9th inst. at hand. In reply, I am sorry to be compelled to say I can not be in attendance. I had fully intended to be present at the annual meeting, but I attended the Commissioners' Convention at Indianapolis, and from there I visited my old home in New York, and have just returned. Hoping that I may be able to attend the next annual convention, I remain,

Yours sincerely,

JAMES C. MOORE,
Factory Inspector.

OFFICE OF STATE FACTORY INSPECTOR,

MILWAUKEE, WIS., *July 11, 1888.*

Hon. HENRY DORN :

MY DEAR SIR: Yours of July 9th at hand and contents noted. Was very much pleased to hear from you, but regret exceedingly to state that I will be unable to attend the annual Convention. The Brotherhood of Machinery Molders of North America will hold their Convention in Detroit on the 6th day of August, and as I am Treasurer of that body, it will be expected that I will be in attendance.

Hoping that the Convention may prove a profitable one, I remain,

Yours respectfully,

HENRY CLAYMIER,
Factory Inspector.

DEPARTMENT OF PUBLIC WORKS,

TORONTO, ONT., July 17, 1888.

Hon. HENRY DORN, Chief Inspector of Factories:

DEAR SIR: I have just returned from a tour of inspection, and find your cordial invitation to attend the annual Convention of Factory Inspectors, to be held at Boston, Mass., on the 8th of August, for which accept my thanks. I regret exceedingly that I cannot accept your invitation, more especially for the reason that I had hoped to form your personal acquaintance. Again thanking you, I remain,

Yours truly,

ROBERT BARBER,

Inspector Factories Western District.

DEPARTMENT OF PUBLIC WORKS,

TORONTO, ONT., July 17, 1888.

*Hon. HENRY DORN,**Chief Inspector Workshops and Factories, Columbus, Ohio:*

MY DEAR SIR: I am in receipt of your kind invitation to attend the Convention of Factory Inspectors, to be held in Boston on the 8th prox. At present it is impossible for me to state whether I shall be afforded the pleasure to attend this year, but if not I hope to be with you next.

I desire to congratulate you on the success of your efforts in promoting the welfare of the Convention, which is destined to be of great benefit to employes as well as to employers. The meeting together of the Inspectors, and the exchange of ideas in regard to safeguards to machinery, etc., and the publication of the proceedings of the meetings, must necessarily tend to improve the condition of the workers, which is the primary object of labor legislation.

Wishing you every success in your good work, I remain,

Yours respectfully,

JAMES R. BROWN,

Inspector Factories Central District.

On motion, the President was empowered to decide upon the date of holding the next annual Convention.

Secretary Dorn, of Ohio, exhibited a model fire-proof stairway, which model was made and the system of fire-escape invented by himself. He also exhibited two elevator models, one with automatic gates attached, the other with an endless belt (the belt to be made out of woven wire cloth), one end of which is attached to the top of the cage, running over two rollers at the top and two at the bottom of the shaft, the other end being fastened to the bottom of the cage, thus closing all openings on floors where the elevator cage is not in use, thereby preventing accident from falling into the elevator shaft. The manufacturer of this design is Mr. James Grimme, of Cincinnati, Ohio.

The automatic gates have been found to be superior to all systems in use, so far discovered by the inspectors. The automatic gate elevator is also manufactured in Cincinnati, Ohio, by Schumacher & Banse, of the Queen City Manufacturing Company.

Speaking of his invention of fire-proof stairways, Secretary Dorn exhibited drawings, made by himself, of *outside* fire-escapes, thus to show the superior workings of an *inside* escape.

In referring to his reports to the Legislature, he says :

The first report, which I made in 1884, when the office of Factory Inspector was created in our State, was to the effect that nothing in the course of my inspection has more strongly impressed me than the necessity of requiring all shops and factories of a greater elevation than two stories to be provided with a safe and efficient system of fire-escape. The duty of supplying safe guards against the terrible casualties likely to occur in the event of conflagrations in crowded shops and factories is so obvious and imperative, that there can be no difference of opinion respecting it. It is of that class of self-assertive obligations which admit of no controversy, the only question being as to the best method of adequately meeting it. Nevertheless it is a fact, amply demonstrated in the observation I have had, that very many owners and proprietors of shops and factories are wholly indifferent to this important duty, and I found some so utterly destitute of all concern for the safety of employes, as to refuse to provide proper escapes when their attention was called to the necessity of such provision. It is somewhat difficult to speak with calmness of men whose overweening selfishness has excluded from their natures every spark of consideration for their fellow-beings, who, while liberally insuring their property against fire, so that in case of such a visitation—a danger always imminent—their pockets shall not suffer, will not expend a dollar for the security of the lives of those by whose labor they profit, and it is but simple justice that this class be compelled, by the mandate of inflexible law, to perform a duty which men of ordinarily human instincts accede to without a question. The frequent occurrence of fires which have their most serious result in the loss of human lives, furnishes fearful warnings that should not be heedlessly dismissed from attention, and I submit that the business of legislation can have few worthier objects than that of diminishing, as far as may be, the possibility of such calamities.

Many of the buildings used for shops and factories are from five to seven stories high, and generally the first three or four floors of the building are used as store-rooms, the employes occupying the upper floors, escape from which would, in most cases, be extremely difficult in the event of a rapidly spreading fire, and loss of life and serious bodily injury almost inevitable. Most of the buildings are improperly constructed with reference to means of egress, the ingenuity of the architects having apparently been exerted to secure the greatest possible economy of space in the matter of stairways. Some of these buildings are provided with but a single stairway, and where there are two or more they are generally located so near together that a fire which would render any of them useless as an avenue of escape would be very likely to do so with all. In many cases, also, these stairways are located near elevators, which are most potent aids to the rapid progress of fire. While it is not the province of the State to require that these faults and defects in the construction of buildings shall be remedied, it is unquestionably within the rightful power of the State to demand that the security which the builders have failed to provide shall be supplied in some other way, and a thorough system of fire-escapes is the only other practicable method. The use of straight ladders, as a substitute for some improved fire-escape, on buildings over two stories high, should not be allowed, since they are worse than useless as a means of escape. Not one in twenty who should attempt to reach the ground in this way would get there in safety. They might escape the fire only to find death or permanent injuries from being precipitated to the earth below.

The most appalling calamity that Cincinnati has known for years, occurred on the 21st day of May, 1885, by which sixteen lives were lost by fire. After carefully making a personal investigation of the building, the egress afforded, etc., it came to my mind that something must be invented by which such calamities could be prevented, as even outside fire-escapes would prove to be of little avail in such conflagrations. After years of study, I have invented, I honestly believe, the best fire-escape ever constructed. It is simple in

construction, requires no more room than the ordinary stairway, and does not disfigure the outside appearance of a building as the balcony incline-ladder and other inventions now in use.

An ordinary stairway is built out of iron, two of which are required in a building, located so that they are in opposite direction to each other. They are inclosed with a brick wall, twelve inches in thickness, which forms a shaft, the same as used for elevators, reaching from the bottom to the top of the building. There is no communication with the stairway from the *inside* of the building. This is done for the purpose of preventing smoke as well as fire from entering the stairway in case of a conflagration. An iron balcony is built on the outside of the building at each story, a door leading from each floor, the door from the floor opening outwardly, and is constructed along side of shaft leading into the balcony, where another door is reached, which opens inwardly to the shaft. The doors on each floor open against the adjoining windows, so that a person trying to reach the balcony is not exposed to the flames, should the draught carry the same in that direction. In case of fire, not a particle of smoke can get into the stairway, and escape is made easy, even if the entire building be on fire, on account of having all communication with the stairway on the outside.

This escape evidently obviates a serious objection made to all others, viz., the fear individuals have of ascending them, especially from very high buildings.

The opening of the doors outward and inward are so constructed that in case of emergency they can not be blockaded, as is very often the case in serious conflagrations.

The shaft is lighted by making the doors entering the same half-glass pannels and the top of the shaft is also provided with a sky-light which furnishes sufficient light to make the stairway as well lighted and ventilated as possible.

The invention of Secretary Dorn was unanimously approved by the State Factory Inspectors of the country, which will be seen in another part of the proceedings, by a resolution adopted by the Convention.

Mr. Dyson, of Massachusetts, read a lengthy and interesting paper on "Elevators, Their Dangers, etc.," as follows:

Of the many duties of the factory inspector, none is of more importance than those connected with elevators, and it is becoming of greater importance every year. Whereas, a few years ago an elevator was a curiosity, to-day it is in most general use, and has become a necessity. There is no way of computing the number of persons who daily use this mode of conveyance; but we know it must be thousands—yes, hundreds of thousands. When we consider how few of these passengers know or can know anything of the safety of the elevator on which they ride, or realize the danger to which they may be subject, we see how important it is that this mode of conveyance, equally with railroads and steam-boats, should be under the supervision and control of State authorities.

Massachusetts, as often in similar matters, is in the van, and has taken important action towards protecting her people. In 1877, a law was passed for the guarding of the openings to elevators and hatchways. In 1882, still further legislation, which reads as follows: "All elevators, cabs or cars, used for freight or passengers, shall be provided with some suitable mechanical device, to be approved by the inspectors, whereby the cab or car will be securely held in the event of accident, to the shipper-rope or hoisting machinery, or from any similar cause."

In 1880, the inspectors were given additional power to enforce compliance with the law by entirely forbidding the use of any elevator that they believed to be dangerous.

It is with reference to this law, and the work under it, that I wish especially to speak, and of what has been learned by nine years of experience. All styles of elevators may be comprised in one or two classes, viz.: Those that need safety devices, and those that do not.

The latter class includes all those elevators that are raised by a support below the cab or car, as the "plunger elevator," so-called. The other class comprises all elevators that are raised from above by means of ropes or cables, and includes the common belt, steam and hydraulic elevators. The one class gives an elevator that even the non-expert can see to be as nearly absolutely safe as can be desired, and whose safety cannot be increased by any so-called "safety device."

The other style of elevator, as it hangs in mid-air, can but suggest the many dangers to which the nature of its construction must subject it, and the need of every safety device that is of any value. For the protection of this class, hundreds of so-called safety devices have been invented, and many of them have been adopted by the elevator manufacturers, and used with their machines.

The language of the law, in this State, is very explicit and exacting, and certainly places a grave responsibility on the inspector.

At once arises the question, "Is there any mechanical device which will securely hold the car in case of accident *from any cause?*" If there is not, how can the inspector approve *any?* Of course, every elevator builder will tell you that his particular device satisfies the demand for safety, and at the same time intimates that the devices of the other companies are of little worth.

When the inspectors began their work under the laws of 1882 and 1883, they found hundreds of these rope and cable elevators provided with so-called safety devices, many of them of recent invention, that were worthless, to the surprise of the parties using them.

It would not do for the inspector, although given great power under the statutes, to at once arbitrarily condemn all these elevators and declare that no safety device gave the requisite protection.

Most of the devices which were claimed to satisfy the law, were new and untried. It was proper that we should move cautiously in the matter, until we could see what time and experience would prove.

From the first, a large number of these so-called "safety devices" were brought to our attention to be tested, and many of them passed what is said to be a satisfactory test. It is not difficult to make a mechanical device that will operate under certain conditions all prepared, for then you can generally have a successful test. Yet, I believe that even with the conditions made favorable for any particular device, it can be put to a test where it will not work, and to no severer test than it may meet in the event of accident.

I find many owners of elevators unwilling to risk the damage to their property by allowing the inspector to try such tests. If such may be the action, or rather the non-action, under favorable conditions, what can be said of their probable action under unfavorable conditions, so frequently occurring—the neglect of oiling, the lack of proper adjustment of parts, the wear and tear of continual use, the poor workmanship or material, in the scramble of competition, to satisfy a false economy with a low-priced product, the placing of the machinery in some dark, out-of-the-way place to avoid using some valuable floor space, the unexpected obstruction to the working of the safety device. All these might be illustrated by examples of actual accidents, accompanied by loss of life and limb.

Furthermore, it is always the unexpected that happens. It is the breaking of something for which no safety device had been provided. The elevator builders have realized this, and have multiplied the variety of safety devices until they almost cover their machine with them, at the same time increasing the complexity of the same. And it may be rightly said that there are almost as many opportunities for accidents as there are parts to the machinery, and it is therefore impossible to protect at all points. This can be seen by observing the variety of accidents that are so frequently occurring. These dangers are recognized by the best of elevator builders.

One of the leading manufacturers of Boston, after narrating in their catalogue the many dangers of cable elevators and their safety devices for preventing the same, show

their own lack of confidence in the devices by recommending, in addition to the adoption of the air cushion, a device so certain in its action, and so simple in construction, that it should *always* be used where room is available.

Otis Brothers, the great cable builders of New York, have this year been making tests with the air cushion device, and doubtless recommend them.

As I said before, we have seen these trial tests of safety devices made successfully under favorable conditions, and yet our years of observation and experience show us that the only fair test—time and actual use—proves that cable elevators do fall, although made by the best builders in the country, and supposed to be supplied with the best of safety devices. This is shown by the accident in New York City last year, by the breaking of a pinion wheel; the recent accident at Springfield, where the car caught, cable unwound, allowing the car to fall; by the late fall of the elevator in the Quincy House, said to be by the slipping of a belt. I understand all of these elevators were built by different companies and leading manufacturers of the country. Many other similar cases could be cited. I in no wise mean to disparage these manufacturers, for many of them are deserving of great praise, for the money and efforts they have expended in the endeavor to protect humanity from the danger of that natural law—the law of gravitation.

Though the inspectors, after these years of experience with cable elevators, cannot approve of many mechanical devices as certain to hold the car securely in case of accident, as set out in the statute, they would not feel justified in condemning all cable and rope elevators, for in some places and conditions, they are a practical necessity.

It seems to me that inspectors can, and it is their duty to, under our laws, do much for the protection of the public. All of the hoisting machinery, as far as possible, should be placed in a light and accessible place; the rate of speed should be regulated by the inspectors, or by further legislation, if necessary.

Though in America, time is money, there are but few places where the rate of speed for freight should be over one hundred feet per minute, and not over two hundred feet per minute for passengers. This is fast enough for all ordinary service.

Fortunately, the public itself is looking with disfavor on the fast-running elevator. This applies to that class of elevators which are drawn up from above by cables or ropes. Now, while many have been working for improvements in this class, others have sought for the safety of mankind by an opposite course, and instead of seeking the end by complicated machinery, they have striven for greater simplicity in construction. I refer to that class that I said need no safety device, so-called, and that includes the direct plunger and telescope elevators.

The method of lifting a car by means of a piston or plunger is not new. In fact, it was one of the first in use, and to-day is practically the only method used in England and Europe.

Though this style of elevator has not been so widely introduced in this country as the cable machines, it has met with marked success in certain localities, and has been continually improved and adapted to public use, especially during the last few years.

It may be said to have now reached a new era of development in the perfection of the sectional or telescope elevator, which has the same principle of absolute safety as the single plunger elevator, and at the same time avoids the chief difficulty sometimes found in the construction of the latter.

What is it that commends these elevators for safety? First, the simplicity of construction. As you all doubtless know, the elevator consists of an iron cylinder sunk in the ground, with a closed bottom and a packing box on the top. Into this cylinder passes the iron pipe called the piston or plunger, which lifts the car or load.

If the elevator is a single piston, its length is the height of the desired run. If telescope, there may be two or more pistons, which slide into each other, and whose extended length is the desired run.

This, with the valve and the valve-rope, constitute all the machinery necessary. This elevator can be run without ropes, drums, or any of the other complicated parts

that threaten accidents. A cable is sometimes used to run a counter-weight to the car, and the only accident I ever heard of in this style of elevator was when the counter-weight was made heavier than the car, and the latter becoming detached from the piston, was drawn to the roof, and then fell. But such carelessness as over-counter-weighting is easily avoided.

I have observed these elevators for years, and personally examined many of them, and have never known of any accident or chance for accident from the breaking of the machine. The car, with its load, always rests on the strong column of wrought iron, steel or brass, as the plunger may be made of either, and whatever weight may be placed thereon, the car cannot descend any more rapidly than the water can pass out of the cylinder through the valve and opening made for that purpose. These cylinders are now made of wrought iron, and if the pressure of any weight put upon them should be greater than the cylinder could stand, the only result would be the opening of a seam therein, through which the water would escape and the elevator slowly descend.

You may say, "Why, then, is this style of elevator not universally used?" Largely from false ideas of economy of those who own buildings, and use elevators. This is strictly a hydraulic or water elevator, that is, water must be used as a power to operate it.

When the pressure of the public water supply is sufficient, the elevator has simply to be connected with the water main, and then no other style of elevator can be more easily and economically used. When such a pressure is not found, it is necessary to use a pump. Many of our buildings, and especially factories, have a pump for protection from fire. These pumps can be used with a hydraulic, and by being thus adapted are all the more efficient in case of fire, for they would be at all times ready for instant service.

The owners of many buildings and factories believe that the cable elevator, connected by belt to the shafting, costs them little or nothing to run. This is a mistake, for any educated engineer can show you in figures just what it costs for the power to run a belt elevator, and it is as much or more than it costs to run a pump.

But what, doubtless, has more influence with the purchaser is the extra first cost of the hydraulic elevator with pump over the cheap belt elevator, and this is a fact. But, of how little consequence is this extra first cost, when it is considered that an elevator is a permanent part of the building or plant? And the extra cost of the one style furnishes a machine absolutely safe, occupying little floor space, so simple and yet strong in construction that the annual expense for repairing and renewing of parts is next to nothing, while the cheaper class, from the nature of its construction, must require continual repairs and renewal of cables and other parts, occupies valuable floor space, unless tucked away in a dark corner, which is a dangerous practice, must be frequently inspected and watched to avoid accidents, and renders the owner liable to the lawsuits we see so frequently in the courts, brought by the injured employe or passenger, for large damages for injury suffered by the fall of the elevator.

Many of our manufacturers and builders are fast learning that the cheaper machine is the more expensive in the end. The well known Washburn & Moen Manufacturing Co., of Worcester, now using perhaps twenty of these plunger elevators in its great establishment, will have no other, and would not take a cable or belt elevator at any price.

There is one feature of the direct plunger elevator that frequently largely increases its first cost, and that is the sinking of the hole in the ground for the cylinder. It is probably this, more than anything else, that has retarded the general introduction of this style of elevator. Of course, there is only one way of avoiding a hole as deep as the height of the run, and that is by telescoping the pistons.

Some years ago many experiments were made to perfect such a machine, without the best results. Time and money has continued to be expended in inventions and improvements in this direction, and to-day a satisfactory telescope elevator is produced, and is being largely manufactured and introduced by the Worcester Elevator Company, of my city. It avoids the sinking of the whole or cylinder to any great depth, and yet preserves the valuable elements of the direct plunger elevator.

Having been asked to speak upon this subject of elevators, and especially with reference to their safety, I was naturally led to discuss the merits of the plunger elevator, because it is a style of elevator that has been more extensively manufactured, more generally used, and more thoroughly tested in my district than in any other part of this country, and furthermore, after many years of experience, I believe we are working in the right direction in seeking a machine that is itself safe, rather than taking one that is dangerous, and seeking to find devices that will protect it.

On motion, the Convention adjourned, to witness an exhibition by the Boston City Fire Department, to meet again in evening session at 7 P. M.

EVENING SESSION.

The Convention met at the appointed hour, President Wade in the chair.

Mr. Buxton, of Massachusetts, read an important paper on Industrial Laws, and the employment of children in factories, as follows:

The first statute to regulate the compulsory education of children, was enacted in Massachusetts about ten years ago. A similar law has existed in England for many years, but it was new in this country, and much complaint was met with at first about the State interfering with private enterprise. The people, ever alert in defending their liberties, demanded to know by what right the State dictated whom they should or should not employ. Why was it not an advantage to the country to employ these thousands of children, and thus make their families self-supporting?

In reply, we explained that in this republic the man is a citizen as well as a laborer, and if he be not fitted to intelligently perform his duties toward the government, he is the most expensive and dangerous person they can employ; that children deprived of school privileges were robbed of the means of becoming self-reflecting citizens, and valuable members of society.

It was easy to convince intelligent New Englanders that morality and knowledge are necessary for good government, for looking back over the history of Massachusetts we find nothing more marked than the prominence given to education.

Immediately upon landing, in 1620, one of the first acts of the Plymouth Colonists was to provide school-houses for the children.

In 1642 the Selectmen were required by law to see that provision was made for the education of all children, "So as to be able to read and write, and have knowledge of the capital laws." They well knew that the children of to-day would be the men and women of the morrow, and if they were not educated sufficiently to understand the "capital laws," they would not advance in civilization or be able to govern themselves, much less others.

Again, in 1647, another step was taken in the right direction, when every township of one hundred families were required to maintain a grammar school, in which boys could be prepared for Harvard College. Thus we see that legislation regarding the education of children did not begin in this generation, but commenced back in 1620, when the Pilgrims landed at Plymouth.

This statute regarding the compulsory education of children is only one of the numerous additions made, from time to time, to the original legislation, to meet the changed conditions of society and public opinion.

It will be noticed that these early laws have reference only to the providing of the means of education—the desire for knowledge was then so prevalent that nothing more was necessary.

The causes which have brought about a change of sentiment in this respect, and to make the compulsory act desirable, are too well known to be enumerated here.

It is generally conceded by the intelligent people of to-day, that it is not only the right of the government to provide the means for education, but its duty to require it also. The ground of this duty is the simple fact that education is the pillar and support of a republic. Illiteracy on the part of a nation, to whom is intrusted the privilege of self-government, is a great peril to its very existence. A government that aspires to be a model among all free nations, should not confess that it has no right, directly or indirectly, to a controlling influence in the education of its own children.

Now, education does not create, or even absolutely secure intelligence. Its object is to promote the development of intelligence; to afford a stimulus to its growth, and to provide the individual with the necessary means for that self-culture by which native capacities are increased. In other words, it draws out all that is best in the nature of the person, and gives the child a chance to discover that it possesses faculties which, if developed and educated, will greatly enhance its happiness and better its condition. But children must be healthy in both mind and body to derive this benefit from the schools, and this brings us to consider another aspect of this question of child-labor.

The argument is often advanced, that children had better be at work than running the streets, and learning all manner of wickedness. My only excuse for introducing so trite a saying here, is because it is so hackneyed, and also because it is a very mischievous expression, as multitudes of good but thoughtless people accept it as logical, and a justification of a serious evil. Now, first, it is self-evident that it can only be the children of very ignorant or very vicious parents who are reduced to the dire necessity of working or running the streets during the years of childhood and early youth; and, secondly, it is also self-evident that labor, at anything a child is capable of doing, for ten hours daily, is injurious to the mind of any child under sixteen years of age. The labor may not be hard, the air may be as pure as that of the school-room, but the weariness of the endless repetition of the mechanical action, the continual over and over of certain physical motions, giving no opportunity for change or variety, is very depressing and tends to dull and stupify the mind of a growing child.

Compare the children who have passed a year in even the poorest of our schools, and those who have spent the same length of time in one of the best of our manufacturing establishments, and comment would be needless. The tendency of the one is to awaken the dormant faculties of the mind, stimulate the sluggish powers of the soul, and give us men and women with keen, active, wide-awake brains, wise, intelligent souls in healthy bodies. The tendency of the other is to dwarf the soul, stupify the mind, and reduce the human being to the level of a machine, and a dangerous machine, also, because brutalized and degraded.

There is another benefit derived from the training of the schools, which the children of this class seldom received elsewhere, and that is a certain discipline of mind and conscience which develops within them an enlarged respect for the rights of others, which makes them more patient under control; their sense of justice is also stimulated and quickened, while they are enabled to secure their rights without appealing to brute force. Overseers and others having charge of children are unanimous in their testimony regarding the greater ease with which children who have had the benefit of the schools are guided and controlled, and from being violently opposed to the law are now heartily in favor of it, not only for the benefit conferred upon the children, but for the help they themselves derive from it.

Again, a child who has not been taught to obey rightly, will never be able to command rightly, either themselves or others. Many men employed in these factories have said, with tears in their eyes, that if this law had been in force when they were boys they would not be in the humble positions they now occupy.

Overseers pronounce the labor of a child under fourteen years of age undesirable and unprofitable, but parents, ignorant and selfish, or ignorant and vicious, insist upon the

child earning something at an age when many would think they still belonged in the nursery. So, for the sake of securing the services of the older ones which are profitable help, they employ the children and often co-operate with the parents in seeking to elude the vigilance of the inspector, and employ them unlawfully.

The better class of manufacturers, after these years of trial, frankly admit they are benefited in many ways by the change, and cheerfully co-operate with the inspector in securing the enforcement of the laws. They are wise enough to realize that educated labor is more desirable in many ways—the quality of the work accomplished is better, the people are more steady and contented, they are competent to manage their own affairs and secure their own interests, and never, except through misfortune, become objects of charity.

Here we have the testimony of the more enlightened operative, the overseer and the manufacturer, all in favor of the laws, but in spite of this, for the reason given above and others of a kindred nature, it requires the constant vigilance of the inspector to secure honest enforcement of the statute.

It will be seen that ignorance is responsible for most of the difficulty. Even selfish or vicious parents, were they not also ignorant and short-sighted, would see and realize for themselves that it is for their own advantage as well as for the benefit of the child that he be well educated.

But there is one complaint with which we often meet, and one so reasonable and just, it deserves our immediate attention.

The necessity for these laws has existed but a short time, and only a small proportion of the States have adopted them. The beneficent influence of the statutes in the States where they have been fairly tested is so apparent, and it is only a question of time when they will have become universal.

In the meantime vexatious complications are constantly arising in towns adjoining States where these laws do not exist, which bear hardly and apparently unjustly upon the interests of our law-abiding manufacturing communities. The country at large is also suffering severely from labor troubles of various kinds, and the prosperity of the nation would seem to demand some speedy remedy.

I would respectfully suggest to this convention the advisability of considering whether we, as inspectors, to whom has been intrusted the enforcement of this compulsory educational law, have not some responsibility in the matter, and also the need of adopting some measure to impress upon the country the urgent need of concerted action in the matter.

The prosperity of the State is so closely allied to the prosperity of the citizen, that one cannot be injured without detriment to the other; if one State suffers from labor troubles the other States are affected in a lesser degree.

I do not hesitate to affirm that the principal cause of the scarcity of strikes in Massachusetts is due to the proper enforcement of these laws, seconded by the general intelligence of the people. Educated labor seldom strikes. Abolish ignorant labor and you abolish the office of the demagogue. Inflaming the passions of the employed against the employer would be impossible in an intelligent community, and thus class-strife, with its long train of attendant evils, would be unknown. Compute the millions of dollars that strikes have cost capital in this republic the last few years, and let capital say whether it is good economy to employ ignorant labor. I mention the money aspect of this matter in deference to the prevalent custom of judging everything from a financial standpoint, but all thoughtful people will agree that this is the most trivial side to a trouble which has rapidly developed in a few years to very serious dimensions, threatening the peace and prosperity of the nation.

The demagogue, openly taking advantage of the ignorance of his fellow-citizens to influence them to their own destruction and the detriment of the government, is a sad spectacle to be witnessed in a republic, and the condition of the country which makes

such transactions possible, is one of the gravest problems confronting the statesman to-day. It claims our attention from the fact that ignorance is at the bottom of all the difficulty, and we would be unfaithful to the trust committed to our care if we did not seriously consider the matter in connection with the working of this law. It is one of the measures adopted by our legislators to stem the tide of ignorance and anarchy which is threatening to engulf the nation as in a flood, and a protection to the poor and oppressed, who for good or evil, are flocking to our shores in multitudes from all the nations under the sun.

I do not unduly magnify our responsibility when I assert that much depends upon the manner in which we discharge our duty. Let us seek to execute the laws with such wisdom of method that the good resulting from them may be plainly apparent to the whole country. If there are any defects in the law itself, or in our manner of enforcing it, let us seek them out to the end that they may be remedied, and that we may have the assurance that our efforts will hasten the day when education and intelligence will be so general that the country shall again be free from those evils resulting from ignorance, and acquit ourselves as good citizens of a government which deserves the best service we can render.

Mr. Coe, of New York, was called upon, and spoke at length in reference to employment of children in factories, from his personal observation, which he did in a very forcible and creditable manner.

Messrs. Davis, of Rhode Island, McDonald, of Ohio, Hall, of New Jersey, and Campbell, of Maine, also spoke on child-labor, handling the subject very intelligently.

Secretary Dorn, of Ohio, arose and said that his report to the legislature, relative to child-labor, was such that he thought it advisable to repeat a portion of it, as follows:

The subject of child-labor has engaged the earnest attention of publicists and philanthropists for generations, and in the general progress of ameliorating influences and agencies, this matter has received a share of consideration. That it has not obtained that full measure of regard which its great importance merits, will not be seriously questioned by any one whose experience or observation gives him authority to speak.

Legislation has bravely sought to baffle the cupidity and selfishness of those who would profit by the labor of children, but its success has been only partial and irregular, and throughout this enlightened nation thousands of children, of tender years, are now laboring ten and twelve hours a day in shops and factories, the great majority of whom should be acquainted with no severer tasks than those of the school and the home.

While it is true that much of the work required of children thus employed is not of a severely exacting nature, yet it must be maintained that the practice of subjecting young children to a daily round of labor for which they receive a mere pittance in the form of wages, is a wrong alike to the children and to the State, and wholly antagonistic to the enlightened and liberal sentiment of this age.

The tens of thousands of children throughout the country who are in this way deprived of the opportunity to obtain as much of an education as would enable them, when grown to adult age, to understand the obligations of citizenship, is a dark blot upon our character as a people, which our advanced civilization and wonderful material progress do not atone for. It is true that ample provision is made for securing to every child in the State at least an elementary education, but the State is still derelict if it fails to compel those in whose behalf such provision is made to take full advantage of it. Now it is sufficient to declare, in the form of a statute, that this must be done. *Laws do not enforce themselves. There must be an active, energetic and vigilant executive force behind them, fully armed with the power to put them into effect.*

There is hardly any limit to what may be said upon this subject, but the object in referring to it here is simply to bring it to the thought and attention of the legislative power, and not to give to it elaborate discussion. Such discussion, indeed, it cannot need with intelligent men, who intuitively understand that the intellectual and moral training of the youth of the commonwealth is of far greater importance to its future welfare than can be any consideration relating to its merely material affairs. But the policy of controlling and restricting child-labor finds approval as well upon economic as upon moral grounds. There is no gain to the general welfare from this class of ill-remunerated toil. Its products are not materially, if at all, cheapened to the consumer. The profit is reaped by the employers, and it is the heartless cupidity of this class, incidentally aided by the improvidence of parents, that is responsible for the extensive prevalence of child-labor. To successfully combat this sordid instinct, there is required something more aggressive than a simply statutory declaration of hostility. As previously observed, there must be a zealous and vigilant executive force, amply supported, behind the declaration.

Ever since the enactment of the law known as the "Child Labor Law," prohibiting the employment of minors under twelve years of age, and fixing ten hours per day as the maximum length of time a minor under eighteen may be required to labor in any workshop or factory, there has been an active and persistent opposition to the enforcement of its provisions by a few manufacturers. But it is a gratification to know that the opponents of this wise and humane statute are so limited in number that they can almost, if not quite, be counted on the fingers of one's hand; but they are, as a rule, wealthy, and what they lack in numbers they endeavor to make up in activity. If the law is wrong, it should be repealed, or at least its objectionable features eliminated. If it is right it should not be disturbed, unless it be to so amend it that its evident intent shall be so plain as to be beyond cavil.

Is the law wrong? But few establishments in the State object to it. Their grounds of opposition are not that ten hours per day is not as long a time as boys and girls under eighteen years of age should be required to labor, but that a compliance with the provisions of the law would seriously interfere with their business as at present conducted. This, put into plain English, means, if it means anything, that the making of a few dollars more or less by the manufacturer is of more importance than the welfare of the rising generation; that the making of money is the main object of life, even though it be necessary in seeking that end to sacrifice the health and future prospects of all those youth the poverty of whose parents deprives them of the privileges and advantages of the public schools, and compels them to accept employment wherever found, and upon whatever terms tendered. Such a principle is abhorrent to the nature of every man who is not absolutely blinded by avarice. It makes the man subordinate to the dollar. It takes no account of life and its enjoyments, usefulness and possibilities, and destroys all the noble aspirations of which a human being is capable, that the pecuniary interest of one man may be advanced.

It is further claimed by some manufacturers that they employ children under twelve years of age only for the good of the child and the benefit of its parents, and therefore they dislike to discharge them. This argument in favor of the repeal of the law will not have much force with any one who knows the motives that govern business men in their actions; nor will it satisfy those who have some regard for the future intelligence and capacity of those upon whom the State will, in a few years, have to depend for the direction of its affairs and the maintenance and perpetuation of the blessings of civil and religious freedom. The argument is unworthy of serious consideration. The motive that prompts it is so transparent that no one need be deceived.

It is also asserted that boys and girls under eighteen years of age are perfectly satisfied with the rule of employers that require them to work twelve and thirteen hours per day, and that they have no desire for a change of work-hours. This claim is so ridiculously absurd as to excite a smile. To say that youth of that age, or even adults, are satisfied with such hours of labor, is to talk supreme nonsense. It is contrary to the plain dic-

tates of nature; it deprives them of all opportunity for recreation, for reading, and for amusement. Every man knows from his own experience that it is utterly destitute of even the semblance of truth.

The law is right, and should be allowed to stand. It is a law in the right direction. It is in the interest of humanity and justice, and in accordance with the enlightened sentiment of the times. While the State has upon its statute books a law making eight hours a legal day's work even for adults, it certainly would be the height of inconsistency to say that a manufacturer shall have the privilege of compelling minors to labor any number of hours his selfishness may dictate. The best interests of the youth of the State, and therefore of the State itself, forbid such a policy. As well turn back the hand of time fifty years, and obliterate from the face of the earth the progress made by the human race in the last half century. All over the world the demand is for a shorter work-day, and in England especially—monarchical England—the legislative power, as well as public opinion have recognized the rightfulness of the demand. In almost every northern State of this Union legislation has been had upon this subject, and in some of them to a far greater extent than in Ohio. No State excels, and but few equal, Ohio in the munificence of her appropriations for the unfortunate insane, blind, deaf and dumb, and other deserving objects of charity. Will she be second to any other in her care of her youth, and in protecting them from the cruelty too often practiced upon them in some of our factories and workshops? It is now too late in the nineteenth century to even think of a retrograde movement in this matter.

The claim that business cannot be successfully carried on unless the employer be allowed to work children more than ten hours a day is one unworthy of any man, and is in direct conflict with well known facts. A business that cannot thrive without such a sacrifice does not deserve to thrive. The sooner it is wiped out the better. It is not legitimate, and should in no way be encouraged. Who will justify the sacrificing of helpless children, depriving them of all opportunity for healthy recreation and innocent amusement, destroying their future prospects by making unthinking and unfeeling machines of them, that some one may thereby thrive and grow fat? Surely, no one who takes any interest in the future of his race, or who desires to have the progress of the past and present—mental, moral and physical—go on unchecked and unimpeded in its humanizing and elevating career, can for a moment countenance such a proposition.

It is to be hoped that the General Assembly will give no heed to the representations of any party desiring the repeal or essential modification of the "Child Labor Law." It was enacted in response to the demands of the best people of the State, and in the interest of the civilization of the age, and in its beneficent features should not be frittered away, and children left a helpless prey to men who worship at no shrine but at that of the almighty dollar. It has so far worked nothing but good, and promises still greater blessings in the future. It is willingly accepted and cordially approved by an overwhelming majority of the manufacturers of the State. It benefits the children and wage-workers generally, and inflicts upon no one.

In conclusion, let me again repeat, we must not bring our children up in ignorance. Let us educate them, and then the best interests of the country will be subserved, good and wholesome laws enacted, an easy enforcement of the same will be brought about, poverty will be driven from the land, our duty to our offspring will have been performed, and success will crown our efforts.

On motion, a committee of six, consisting of Messrs. Franey, of New York, Campbell, of Maine, McDonald, of Ohio, Buxton, of Massachusetts, Davis, of Rhode Island, and Hall, of New Jersey, were appointed to prepare resolutions, as the sense of the Convention on compulsory education, prohibiting children under the age of fourteen years from working in factories or workshops, defective machinery, buildings, etc., and report the same to this Convention before adjournment.

Mr. White, of Massachusetts, read an important paper on fire-escapes, as follows:

The intense dread which all persons have of death by burning, creates a greater public interest in the matter of protecting the inmates of factories and public buildings from fire than attaches to any other of the statutory regulations governing the inspection of such buildings. Yet the statutes in this regard are less definite in their provisions, and there is less in them to guide an inspector in his work, than in any other of the laws which we are called upon to enforce. Indeed, what little there was in the laws of this State to define what should constitute proper means of egress and escape from fire in such buildings, has been repealed, and the whole matter left to the judgment of the inspectors.

Whether this was wise legislation or not, the duty and responsibility is forced upon us, and we must carefully consider how we can most effectually carry out the purpose of the new statutes which evidently is that more careful precautions shall be taken in this respect than were ever before thought to be necessary.

With the exception of some few provisions for hotels, lodging and boarding-houses, contained in Chapter 251 of the acts of the year 1883, all the present statutory regulations guarding against danger to life from fire in buildings are embodied in Chapters 316 and 426 of the acts of the legislature of the present year.

The first mentioned Chapter makes provisions in regard to buildings to be hereafter erected, and the other for buildings already in use. The law, in relation to new buildings, will be comparatively easy to enforce, as the plans and specifications of all such buildings must be submitted to an inspector for his approval before the building is erected. The inspector may require that such changes shall be made as he may judge to be necessary to secure safety, and also that proper fire-stops be put in to prevent the spread of flame and smoke. This last mentioned provision is a very important one.

It would be of little use to put a fire-escape on a powder house, and hundreds of the buildings now occupied for tenement and lodging houses would, under favorable conditions, burn so quickly as to render nearly useless any means of escape that can be provided. The late fire in a tenement-house in New York is a striking example of the terrible results of such methods of construction.

I have lately inspected a public hall in the fourth story of a building, where the only stairway, and that a narrow, one, is built around a well-room intended for an elevator. There is no elevator there now, but the open shaft makes an excellent flue for flame and smoke.

Another case is where there are fourteen tenements in a wooden building, the lower story of which is occupied as a furniture store, which is completely filled with goods, including a barrel of varnish, and is without even a partition to prevent the spread of fire, and the ceiling of which is not plastered; nothing but the bare timbers and floor between all that combustible matter and the sleeping inmates of the bed-rooms above.

The law requires that the means of escape from fire in this building shall be sufficient for all the persons to be accommodated therein. I can cover the outside with fire-escapes, but I can do nothing to prevent the spread of fire, as I could do in a building to be hereafter erected for such a purpose.

Evidently the law is not broad enough in its provisions for buildings already in use.

In one way such cases are easy to deal with. There is never any doubt that everything should be done, which can be done, under the law, to make them safe.

Another class of buildings are harder to decide upon. They come very near being safe, so near it that in many cases a few dollars expended in fire-stops when they were constructed, or a slight change in the plan, would have saved a much larger sum in fire-escapes.

The owners of such buildings frequently do not see their danger. They think the buildings are safe, and the architects, if there were any, are sometimes willing to protect

themselves from blame by asserting that the inspector is "cranky" and unreasonable in his requirements. But in all cases the responsibility now rests on the inspector. It is his certificate, and not that of the owner or architect, that is to be posted up in the building. Before that is granted he may require a compliance with the law, but, the certificate once issued, he must be content to bear the blame for any neglect to exercise his authority if any disaster occurs.

And this brings us to the most important subject of this paper: What shall be required, and what may be considered sufficient means of escape from fire, in the various buildings covered by the new laws? The almost infinite variety of the conditions he will meet with in his work precludes the possibility of any very definite rules to govern an inspector in deciding these questions. He must inevitably be controlled by his own judgment in every case that comes before him. Still, there are some things which it seems to me should be done in all cases, and some others which should not be done, and I will endeavor, in a brief way, to indicate what these things are.

In considering this subject, the buildings coming under the law may be divided into two classes; the first class, including school-houses and places of public assemblages only, and the second class, factories, workshops, hotels, boarding, lodging and tenement-houses.

In the first class, the regular and ordinary ways of egress ought always to be made as safe as possible. In my judgment, a school-house ought never, under any circumstances, to be provided with what is commonly called a fire-escape; that is, a flight of steps, open to the weather, and so liable to be obstructed by ice or snow just when most needed, and down which only one person can go at a time. If the ordinary ways of egress are not safe, beyond a reasonable doubt, a good, wide, easy flight or flights of stairs should be constructed, entirely independent of the other stairways, properly connected with the rooms, and completely inclosed from the weather. If all school-houses were restricted to two stories in height, as they should be, there would be no trouble in securing safe egress, and if wood-work of all kinds, except for the treads and hand-rails of the stairs, was banished from the staircase halls, the ways of egress could be made safe from three or four-story buildings, if want of land made them necessary.

Where public halls are located above the first story, the stairways leading to such halls should be fire-proof, and should have no connection with any other part of the building. It is not pretended that these provisions for safety can all be required under the present law, but much may be done in that direction by a judicious use of fire-stops, and even a wooden building may be so constructed that it will be almost impossible for a fire to work quickly enough to prevent the inmates from getting out in safety, provided there is anything like a proper arrangement of the stairways. In a certain school dormitory that was burned last winter, the fire, which evidently caught in a cellar, was first observed coming out through the roof, nearly the whole house being, almost at the same moment, filled with a dense smoke, the fire having quietly worked its way up through the partitions until it probably came in contact with, or caused a leak in a gas pipe, when an explosion followed sufficient to burst off the plastering and liberate the confined smoke. Luckily, it occurred in the day-time, or some of the forty young ladies might have been smothered in their beds or burned to death in trying to escape.

The occurrence of such a fire as this ought to be made impossible in any building hereafter constructed, to be used for a similar purpose. In this latter class of buildings, however, and more especially in factories and hotels, it is sometimes very difficult to so construct and arrange them as to avoid entirely the use of fire-escapes and in many cases it is a question whether properly constructed escapes do not constitute the best, as well as the cheapest form of protection, inasmuch as they enable the occupants of the building to be reached and aided from the outside, when the inner ways of egress are obstructed by flame and smoke, and they can frequently be so located as to be more readily accessible than the regular stairways.

Hotels and lodging houses are, perhaps, the most difficult of all buildings to provide with sufficient ways of escape. In tenement-houses, the rooms of each tenement are generally connected, and it is possible to arrange the stairs so as to give two separate ways of

escape, which are not likely to both be obstructed at the same time, or a single fire-escape may be made to protect several families. In a hotel or lodging-house, each room is a tenement by itself, and it is frequently almost impossible to give all the occupants an equal chance of safety.

In the larger houses, the provisions of the law requiring watchmen, lighted halls, fire-alarms, and notices in the rooms, add greatly to the safety of the guests or lodgers, and in such houses, if there are reasonable ways of egress and escape provided, and the watchman does his duty, there is comparatively little danger. In the smaller houses the reliance must be mainly on the fire-escape for protection.

Portable fire-escapes, such as ropes or rope ladders, in all rooms not easily accessible to the stairways or outside escapes, might, many times, prove valuable auxiliaries.

I have been able to find but little information upon what may be considered a good outside fire-escape, either in books or in the laws of the various States. The law in this State formerly required that fire-escapes should be properly constructed, and have railed landings at each story. Under this law most of the buildings were at first provided with vertical ladders. These have been generally discarded in the later escapes, and steps or stairs substituted to connect the landings. At first these steps were made very narrow, only sixteen or eighteen inches wide, and so steep as to make it difficult for any man to safely descend on them, even in his cooler moments, much less frightened women and children.

Gradually, and mainly through the efforts of the State Inspectors, under Chief Wade, fire-escapes have been very much improved, and the specifications approved by the Chief under the new law, call for a device which, if properly put up and kept clear of obstructions, furnish a good and reliable means of escape from fire for the number of persons it is designed to accommodate. Under this specification the stairs are to be not less than twenty-two inches wide, and the inclination never greater than forty-eight degrees. The balconies are to be forty-four inches wide, and the floors to be of open iron-work so as to avoid lodgment of ice and snow.

The treads are seven inches wide, and constructed of iron slats set edgewise. The stringers are four inches by three-eighths iron, and bracketed to receive the treads. The treads and brackets for ordinary inclinations may all be alike, and can be made by the hundred, thus costing little, if any, more than the old way, while the escape is immensely improved in the very qualities in which the old one was deficient.

Having a good fire-escape, the next thing in importance is to put it where it will do the most good. In hotels it is usual to put a fire-escape at the end of a corridor, opposite the inside stairway. It is a good plan in such places to connect the escape with one or more rooms on each side of the corridor, as it may be possible to make a rush through the smoke and reach one of these rooms more quickly than the corridor window, or the occupants of such rooms may be able to aid any one who is overcome or bewildered in the corridor. It is oftentimes impracticable to connect all the rooms directly with the escapes, and in the event of the stairways and passage-ways becoming blocked by smoke, the reliance for safety must be on outside assistance, or on some means of escape kept in the rooms.

In tenement-houses, the escape should connect with the sleeping room windows, wherever practicable to do so. In workshops and smaller factories, the escapes should be located at the end of the room opposite the main stairway, and in the less dangerous buildings used for manufacturing purposes, such as shoe factories, one such escape is frequently sufficient for the purpose.

In cotton mills and other factories of a more combustible nature, the means of egress required will vary somewhat in proportion to the nature of the processes carried on in the different rooms.

I have never been able to learn of any loss of life occurring from a fire originating in a cotton weave room, while in a mule room too much care can hardly be taken in providing easy accessible ways of escape. Usually the ordinary windows will afford a suffi-

cient way of access to the escape, but where a considerable number of women and children are employed, the access to the balconies should be by doors or windows opening outwardly and extending down to the floor.

Under the provisions of a recent law, every fire department is required to be provided with appliances for the rescue of the occupants of burning buildings.

Such means have been in use in other countries, notably in France, for many years, and are said to have proved of great service in the saving of life.

With all the provisions that can be made the public should remember that no adequate provision can be made against panic, and that cool heads are necessary to render the best means of escape from fire of any avail, and we, as inspectors, must keep in mind the fact that eternal vigilance is the giver of safety as well as of liberty.

On motion, Convention adjourned to meet Friday morning at 9 o'clock.

FRIDAY, *August 10, 1888.*

The Convention met at the appointed hour, President Wade in the chair.

On motion, Mr. Lee, of Poughkeepsie, N. Y., was allowed the privilege of the floor to explain the workings of his portable fire-escape.

Mr. Lee then took the floor and spoke at length on the completeness and simplicity of his escape, explaining the manner of descent in case of conflagration.

Mr. Franey, of New York, asking for information in regard to the best means of protection for hoistways and hand-elevator openings, the discussion was participated in by Messrs. White and Chadwick, of Massachusetts, Hall, Fell and White, of New Jersey, and Dorn, of Ohio.

The latter said that it was a question of great importance, and should be studied during recess, as it mostly referred to a common rope and hook hoist, where it was a very difficult matter to apply any automatic device.

Mr. Dorn then took up the subject of the dangers of buzz, swing and band-saws, also frizzers or shapers and wood-working machinery in general. He discussed those questions at great length, and thereby showed that by the outlay of a small sum of money all such dangers could be prevented. The use of buzz-saws in planing mills, furniture factories and other establishments, are, in fact, the most dangerous tool in use, and although persons operating them know their danger, in the course of time they will become careless, therefore a protection is absolutely necessary, and this can be done at a very small expense, and to the advantage of both operative and owner by putting a guard over the buzz-saw. The guard will not, in the least, interfere with the work of the sawyer, but, on the contrary, will enable him to turn out more work in less time, while protecting his life and limbs.

Mr. Dorn here exhibited a guard manufactured by the Indianapolis Saw-guard Co., of Indianapolis, Ind. He spoke of it in the highest terms, saying that it was the best, simplest and cheapest guard in the market, so far as he knew, and was in use in most factories in Ohio, and that many lives had been saved since the introduction of this guard to the manufacturers of this State.

Band-saws, or endless saws, as they are called by some, are very seldom properly protected. They should be guarded above the table, a little higher than the thickness of the wood the operative is sawing, then an angle-iron, about twelve inches in length, should be placed near the top pulley in such a manner that in case of a break, which frequently occurs, the operative would not be in danger of having his head and hands injured. Band-saws should also be protected at the bottom part of the saw, which should be properly cased in, to prevent the catching of the operative's legs or feet in case of a break.

Swing-saws should always be provided with stationary guards over them, reaching as far as possible over the saw. But what is most needed is a protection, either on the table or overhead, the latter is better, so that in the case of breakage of the rope the saw could not swing out further than the table. Many accidents had occurred in his State before the inspection laws were in existence.

Frizzers or shapers are tools which are very difficult to protect by an outside hood, as the operative cannot see his work well. The best way is to bolt a board on the table just near enough to the work to allow the molding to be made. This board will, in case a hard or soft spot is met, prevent the wood from being drawn in by the cutter, and thereby save the operative from being injured. The cutters which are ground into a sharp angle are not as useful as those which have about a sixteenth of an inch sharp angle, and the rest of the cutter rounded off. The latter will do smoother work and also prevent the wood from being drawn in suddenly by the cutter when passing over a hard spot. The best manner of guarding other wood-working machinery was also explained.

Mr. Coon, of Massachusetts, a practical sawyer, agreed with the system of protection as explained by Mr. Dorn.

Mr. Coe, of New York, spoke at length of the dangers of stamping machines, and advised the inspectors to study this question, and endeavor to improve that class of machinery, and report at the next annual Convention.

Mr. Fell, of New Jersey, spoke briefly on the same subject.

Mr. McDonald, of Ohio, explained the dangers of hot rollers used in laundry establishments, also sandpaper roller machines used in wood-working establishments. He explained very plainly how those machines

could be protected by placing a strip of wood or iron in front of the rollers, so arranged that when they are moved further apart the strip will move with them, thereby never allowing space enough to admit of the rollers catching the operative's hand.

President Wade here introduced Hon. Carroll D. Wright, Commissioner of National and Massachusetts Bureau of Labor Statistics, who briefly discussed the factory laws of the country.

I am deeply interested, he said, in the subject of protecting operatives from accident. Manufacturers are learning that they run to greater advantage in every way when observing stringent factory laws. He spoke of the necessity of overcoming the human tendency of violating corporate rules, and said the best results were brought about under stringent legislation. What benefits the operator is alike beneficial to the operative and the whole community. He then referred to the difference, in the way of cleanliness, he had observed in the factories of Europe, and said where they were worked under satisfactory laws the best results were obtained. He maintained that the labor of the inspector was one of great importance, for the matter of sanitation was one of the most potent factors in maintaining a perfect physical condition. With healthy homes, factories, and school-houses, we may begin to expect higher social conditions. You, as factory inspectors, must be classed with the educators of the land, and I hope in time every State will see the necessity of adopting the same laws under which you gentlemen present are working.

On motion, Convention adjourned to meet at 1 o'clock P. M.

AFTERNOON SESSION.

Convention was called to order at 1 P. M., President Wade in the chair.

Mr. Fell, of New Jersey, raised the question as to where the next annual Convention would be held, and with a few very appropriate remarks, extended an invitation, on behalf of New Jersey, to the members to meet at the capital of that State, in the Hall of the House of Representatives in 1889.

On motion of Mr. Dyson, of Massachusetts, the invitation was accepted, and a vote of thanks returned to Mr. Fell.

Mr. G. P. Hall, of New Jersey, from committee appointed at the last Convention to investigate as to the possibility of changing the patent laws so as to require safety-guards and other protective devices used on machinery for manufacturing purposes, to be patented, made the following report:

Your Committee, consisting of Mr. H. C. Traphagen, of Ohio, (whose term of office as inspector has since expired), G. P. Hall, of New Jersey, and S. C. Hunt, of Massachusetts, opened communication with their respective representatives in Congress, and also consulted with persons acquainted with the patent laws, and from the information

elicited, the conclusion arrived at was that the changes desired could not be secured because of constitutional objections. Nothing more definite could be learned without a visit of the Committee to Washington, and not being clothed with the authority, we did not deem it advisable to take that course.

Report filed.

The committee to prepare resolutions as the sense of the Convention on compulsory education, prohibiting children under the age of fourteen years from working in workshops or factories, defective buildings, machinery, etc., submitted the following, which was adopted:

Resolved, That the Factory Inspectors of the United States, in convention assembled, knowing from experience and observation the evils existing in factory life, and the attendant ignorance prevailing among the factory operatives through lack of effective educational laws, call the attention of legislative bodies and the intelligent voters of the nation to this subject. Recognizing the fact that education is necessary to good citizenship, we advise the enactment of stringent compulsory education laws in every State, and the creation of special officers for their proper enforcement. We insist that all children under *fourteen* years of age should be prohibited from laboring in mercantile and manufacturing establishments. It is against good morals that the sexes should be compelled to use the same or adjoining toilet-closets, and against the laws of health that crowded, ill-ventilated and filthy factories and tenement-houses should be permitted to exist, and the Legislatures of the different States ought to immediately pass laws abolishing these evils. The defective construction of machinery, buildings and elevators throughout the land cause the loss of lives and limbs of hundreds of people annually, and therefore it becomes the duty of the States to place upon their statute books such enactments as will be conducive to the safety of both workers and tenants; and

Resolved, That where factory inspectors now exist, their number should be increased to enable them to properly perform their duties, and where they do not exist, such departments should be created; and

Resolved, That in the framing of the laws advised in the foregoing, we cordially recommend a study of the factory legislation of the State of Massachusetts.

The following resolution, by Mr. G. P. Hall, of New Jersey, was read and unanimously adopted:

Resolved, That this Convention recommend the fire-escape invented by Chief Dorn, of Ohio, as embodying the best and most practical idea yet devised for factories, public buildings and tenement-houses.

Mr. Hall, of New Jersey, moved that the Convention go into election of officers for ensuing term, and that the present incumbents be re-elected by acclamation; which was agreed to.

Mr. Wade, of Massachusetts, President; Mr. Fell, of New Jersey, First Vice-President; Mr. Dorn, of Ohio, Secretary-Treasurer, were then elected by acclamation.

In accordance with the report of Committee on Rules and Regulations, the following additional officers were nominated:

Mr. Franey, of New York, for Second Vice-President, and Mr. Campbell, of Maine, for Assistant Secretary.

On motion, the above-named gentlemen were elected to their respective positions by acclamation.

Mr. Coe, of New York, offered the following preamble and resolutions:

WHEREAS, We, the representative body of Factory Inspectors of North America, are made aware of the fact that the term of office of Hon. Henry Dorn, Chief Inspector of Ohio, will expire in April, 1889; and,

WHEREAS, We recognize in Mr. Dorn a man who has shown exceptional qualifications for the important position of Chief Inspector, his long experience as a skilled mechanical engineer and accomplished draughtsman, peculiarly fitting him for the place he has filled so acceptably to all the people of his State ever since the creation of the office; therefore,

Resolved, That we earnestly express the hope that His Excellency, J. B. Foraker, Governor of Ohio, will re-appoint Chief Dorn at the expiration of his present term of office, as he has proven himself to be the right man in the right place.

Resolved, That a copy of these resolutions, with the signatures of the members of this Convention attached, be forwarded to Governor J. B. Foraker, of Ohio.

On motion, the resolutions were unanimously adopted, and Assistant Secretary Coon, of Massachusetts, instructed to put them in proper shape for signatures, and forward the same to the Governor of Ohio.

Messrs. Wade, of Massachusetts, Fell, of New Jersey, and White, of Massachusetts, each complimented Secretary Dorn in the highest terms on his ability as an inspector, being a practical draughtsman, engineer and machinist of long experience, so well adapting him for the head of the department which he now occupies; for his untiring energy in bringing about the organization of this Association, and for the able and acceptable manner in which he had performed the duties as its Secretary.

Mr. Dorn, of Ohio, offered the following resolutions, which were unanimously adopted:

Resolved, That the thanks of this Association are due and are hereby tendered to His Honor, Mayor O'Brien, of Boston, Lieutenant-Governor Brackett, Mayor Palmer, of Lowell, Superintendents of Lawrence Mill and Lowell Carpet Mill, Board of Trade, Fall River, manufacturers of Lowell, Superintendent of Deer Island, Hon. Rufus R. Wade, Chief Inspector of Factories and his deputies, Hon. Carroll D. Wright, Commissioner of National Bureau of Labor Statistics, and the Boston Fire Department, for the many courtesies shown the delegates while in their midst; and also that our thanks be extended to the Common Council of the city of Boston for the free use of the hall in which our sessions have been held.

Resolved, That the thanks of this Convention be extended to the press of the city of Boston for the able manner in which they have reported the proceedings, thereby placing our deliberations in a proper light before their readers.

President Wade extended an invitation to the delegates to call at his office in Commercial Block at any time during their stay in the city.

No further business appearing before the Convention,

On motion of Mr. Campbell, of Maine, the Association adjourned *sine die*.

Attest:

HENRY DORN,
Secretary-Treasurer.

State Inspection Laws.

The following are the laws of the different States providing for the inspection of workshops and factories, relating to the employment of minors, education, accidents, etc.:

MASSACHUSETTS.

EMPLOYMENT OF LABOR.

SECTION 1. Any person or corporation engaged in manufacturing, which requires from persons in his or its employ, under penalty of forfeiture of a part of the wages earned by them, a notice of intention to leave such employ, shall be liable to the payment of a like forfeiture if he or it discharges without similar notice a person in such employ, except for incapacity or misconduct, unless in case of a general suspension of labor in his or its shop or factory.

SEC. 2. Whoever, by intimidation or force, prevents, or seeks to prevent, a person from entering into or continuing in the employment of a person or corporation shall be punished by fine of not more than one hundred dollars.

SEC. 3. No person or corporation shall, by a special contract with persons in his or its employ, exempt himself or itself from any liability which he or it might otherwise be under to such persons for injuries suffered by them in their employment, and which result from the employer's own negligence, or from the negligence of other persons in his or its employ.

SEC. 4. No minor under eighteen years of age and no woman shall be employed in laboring in any manufacturing or mechanical establishment more than ten hours in any one day, except as hereinafter provided in this section, or when a different apportionment of the hours of labor is made for the sole purpose of making a shorter day's work for one day of the week; and in no case shall the hours of labor exceed sixty in a week. Every employer shall post in a conspicuous place in every room where such persons are employed a printed notice stating the number of hours' work required of them on each day of the week, the hours of commencing and stopping such work, and the hours when the time or times allowed for dinner or for other meals begins and ends, or in the case of establishments exempted from the provisions of chapter two hundred and fifteen of the acts of the year eighteen hundred and eighty-seven, the time, if any, allowed for dinner and for other meals; the printed form of such notice shall be furnished by the chief of the district police, and shall be approved by the attorney-general; and the employment of any such person for a longer time in any day than that so stated shall be deemed a violation of this section, unless it appears that such employment is to make up for time lost on some previous day of the same week in consequence of the stopping of machinery upon which such person was employed or dependent for employment. But no stopping of machinery for a shorter continuous time than thirty minutes shall authorize such overtime employment, nor shall any such stopping authorize such employment unless or until a written report of the day and hour of its occurrence, with its duration, is sent to the chief of the district police or to the inspector of factories for the district. Any person who makes a false report of such stopping of machinery shall be punished by fine of not less than fifty nor more than one hundred dollars. If any minor under eighteen years of age, or any woman, shall, without the orders, consent or knowledge of the employer, or of any superintendent, overseer, or other agent of the employer, labor in a manufacturing or mechanical establishment during any part of any time allowed for dinner or for other meals in such establishment, according to the notice above mentioned, and if a copy of such notice was posted in a conspicuous place in the room where such

r took place, together with a rule of the establishment forbidding such minor {or

woman to labor during such time, then neither the employer, nor any superintendent, overseer, or other agent of the employer, shall be held responsible for such employment.

SEC. 5. Whoever, either for himself, or as superintendent, overseer, or other agent of another, employs or has in his employment any person in violation of the provisions of the preceding section, and every parent or guardian who permits any minor to be so employed, shall be punished by a fine of not less than fifty nor more than one hundred dollars for each offense. Said penalty shall extend to corporations. A certificate of the age of a minor, made by him and by his parent or guardian at the time of his employment in any manufacturing establishment, shall be conclusive evidence of his age upon any trial for a violation of the preceding section.

EMPLOYMENT OF MINORS IN MERCANTILE ESTABLISHMENTS.

SECTION 1. No minor under eighteen years of age shall be employed in laboring in any mercantile establishment more than sixty hours in any one week.

SEC. 2. Whoever, either for himself, or as superintendent, overseer, or other agent for another, employs or has in his employment any person in violation of the provisions of the preceding section, or who fails to post the notice required in section third, and any parent or guardian who permits any minor to be so employed, shall be punished by a fine of not less than fifty nor more than one hundred dollars for each offense. Said penalty shall extend to corporations. A certificate of age of a minor, made and sworn to by him and by his parent or guardian at the time of his employment in a mercantile establishment, shall be *prima facie* evidence of his age in any trial for a violation of the preceding section.

SEC. 3. Every employer shall post in one or more conspicuous places where such persons are employed a printed notice, stating the number of hours' work required of them, not exceeding ten hours in any one day, on each day of the week; and the employment of any such person for a longer time in any day than that so stated shall be deemed a violation of this act, unless it appears that such employment is to make up for time lost on some previous day of the same week.

PROHIBITING THE EMPLOYMENT OF CHILDREN IN CLEANING DANGEROUS MACHINERY.

SECTION 1. No child under the age of fourteen years shall be permitted to clean any part of the machinery in a factory while such part is in motion by the aid of steam, water or any other mechanical power, or to clean any part of such machinery that is in dangerous proximity to such moving part.

SEC. 2. Whoever, either for himself or as superintendent, overseer or other agent of another, violates the provisions of the preceding section, shall be punished by a fine of not less than fifty nor more than one hundred dollars for each offense.

PRESERVATION OF THE HEALTH OF FEMALES.

SECTION 1. Every person or corporation employing females in any manufacturing, mechanical, or mercantile establishment in this Commonwealth, shall provide suitable seats for the use of the females so employed, and shall permit the use of such seats by them when they are not necessarily engaged in the active duties for which they are employed.

SEC. 2. A person or corporation violating any of the provisions of this act shall be punished by a fine of not less than ten dollars nor more than thirty dollars for each offense.

EMPLOYMENT OF MINORS WHO CANNOT READ AND WRITE IN THE ENGLISH LANGUAGE.

SECTION 2. Every person who regularly employs, or permits to be employed, a minor fourteen years of age, or over, who cannot read and write in the English language, providing such minor has been, since reaching the age of fourteen, for one year continuously a resident of a city or a town of this Commonwealth wherein public evening schools are maintained, and is not a regular attendant of a day or evening school, shall, for every such offense, forfeit not less than fifty nor more than one hundred dollars, for the use of the evening schools of such city or town.

SEC. 3. Whenever it appears that the labor of any minor who would be debarred from employment under section two of this act, is necessary for the support of the family to which said minor belongs, or for his own support, the school committee of said city or town may, in the exercise of their discretion, issue a permit authorizing the employment

of such minor, within such time or times as they may fix, and the provisions of said section two shall not apply to such minor so long as said permit is in force.

SEC. 4. Two weeks next before the opening of each term of the evening schools, the school committee shall, by posters posted in three or more public places of said city or town, give notice of the location of said schools, the date of the commencement of the term, the evenings of the week during which said schools shall be kept, the provisions of section two of this act as to the forfeiture for non-compliance with said section, and such regulations as to attendance as they shall deem proper.

UNIFORM AND PROPER MEAL TIMES FOR CHILDREN, YOUNG PERSONS AND WOMEN.

SECTION 1. All children, young persons and women, five or more in number, employed in the same factory, shall be allowed their meal time or meal times at the same time: *provided, however*, that any children, young persons or women who begin work in such factory at a later hour in the morning than the other children, young persons and women employed therein may be allowed their meal time or meal times at a different time, but no such children, young persons or women shall be employed during the regular meal hour in tending the machines or doing the work of any other children, young persons or women in addition to their own.

SEC. 2. No child, young person or woman shall be employed in a factory or workshop in which five or more children, young persons and women are employed, for more than six hours at one time without an interval of at least half an hour for a meal: *provided, however*, that a child, young person or woman may be so employed for not more than six and one-half hours at one time if such employment ends at an hour not later than one o'clock in the afternoon, and if such child, young person or woman is then dismissed from the factory or workshop for the remainder of the day; or for not more than seven and one-half hours at one time if such child, young person or woman is allowed sufficient opportunity for eating a lunch during the continuance of such employment, and if such employment ends at an hour not later than two o'clock in the afternoon, and such child, young person or woman is then dismissed from the factory or workshop for the remainder of the day.

SEC. 3. This act shall not apply to iron works, glass works, paper mills, letter-press printing establishments, print works, bleaching works or dyeing works; and the chief of the district police, where it is proved to his satisfaction that in any other class of factories or workshops it is necessary, by reason of the continuous nature of the process, or of special circumstances affecting such class, to exempt such class from the provisions of this act, and that such exemption can be made without injury to the health of the children, young persons and women affected thereby, may, with the approval of the governor of the Commonwealth, issue a certificate granting such exemption, public notice whereof shall be given in the manner directed by said chief, without expense to the Commonwealth.

SEC. 4. The following expressions used in this act shall have the following meanings: The expression "iron works" means any mill, forge or other premises in or on which any process is carried on for converting iron into malleable iron, steel or tin plate, or for otherwise making or converting steel. The expression "glass works" means any premises in which the manufacture of glass is carried on. The expression "paper mills" means any premises in which the manufacture of paper is carried on. The expression "letter-press printing establishment" means any premises in which the process of letter-press printing is carried on. The expression "print works" means any premises in which is carried on the process of printing figures, patterns or designs upon any cotton, linen, woolen, worsted or silken yarn or cloth, or upon any woven or felted fabric not being paper. The expression "bleaching works" means any premises in which the process of bleaching any yarn or cloth of any material is carried on. The expression "dyeing works" means any premises in which the process of dyeing any yarn or cloth of any material is carried on.

SEC. 5. Whoever, either for himself or as superintendent, overseer or other agent of another, violates any of the provisions of this act shall be punished by a fine of not less than fifty nor more than one hundred dollars: *provided, however*, that if any minor under eighteen years of age, or any woman, shall, without the orders, consent or knowledge of the employer, or of any superintendent, overseer, or other agent of the employer, labor in a factory or workshop during any part of any time allowed for dinner or for other meals in such factory or workshop, according to the notice required by law, and if a copy of such notice was posted in a conspicuous place, in the room where such labor took place, together with a rule of the establishment forbidding such minor or woman to labor during such time, then neither the employer, nor any superintendent, overseer, or other agent of the employer, shall be held responsible for such labor.

INSPECTION OF BUILDINGS.

SECTION 13. The belting, shafting, gearing, and drums of all factories, when so placed as to be in the opinion of the inspectors mentioned in section nine of chapter one hundred and three, dangerous to persons employed therein while engaged in their ordinary duties, shall be as far as practicable securely guarded. No machinery other than steam engines in a factory, shall be cleaned while running, if objected to in writing by one of said inspectors. All factories shall be well ventilated and kept clean.

SEC. 14. The openings of all hoistways, hatchways, elevators, and well-holes, upon every floor of a factory or mercantile or public building shall be protected by good and sufficient trap-doors, or self-closing hatches and safety-catches, or such other safeguards as said inspectors direct; and all due diligence shall be used to keep such trap-doors closed at all times, except when in actual use by the occupant of the building having the use and control of the same. All elevator cabs or cars, whether used for freight or passengers, shall be provided with some suitable mechanical device to be approved by the said inspectors, whereby the cab or car will be securely held in the event of accident to the shipper-rope or hoisting machinery, or from any similar cause.

SEC. 21. No explosive or inflammable compound shall be used in any factory in such place or manner as to obstruct or render hazardous the egress of operatives in case of fire.

SEC. 22. Any person or corporation, being the owner, lessee, or occupant of a manufacturing establishment, factory, or workshop, or owning or controlling the use of any building or room mentioned in section twenty, shall, for the violation of any provision of sections thirteen to twenty-one, inclusive, be punished by a fine of not less than fifty nor more than five hundred dollars, and shall also be liable for all damages suffered by any employe by reason of such violation; but no criminal prosecution shall be made for such violation until four weeks after notice in writing by an inspector of factories and public buildings, of any changes necessary to be made to comply with the provisions of said sections, has been sent by mail or delivered to such person or corporation; nor then, if in the meantime such changes have been made in accordance with such notification. Notice to one member of a firm, or to the clerk or treasurer of a corporation, owning, leasing, occupying, or controlling, as aforesaid, shall be deemed a sufficient notice under this section to all the members of such firm or to such corporation. Nothing in this section shall be so construed as to prohibit a person injured from bringing an action to recover damages for his injuries.

TO PROVIDE AGAINST THE USE OF UNSAFE ELEVATORS.

If any elevator, whether used for freight or passengers, shall, in the judgment of the inspector of factories and public buildings of the district in which such elevator is used, or, in the city of Boston, of the inspector of buildings of said city, be unsafe or dangerous to use, or has not been constructed in the manner required by law, the said inspector shall immediately placard conspicuously upon the entrance to or door of the cab or car of such elevator a notice of its dangerous condition, and prohibit the use of such elevator until made safe to the satisfaction of said inspector. Any person removing such notice or operating such elevator while such notice is placarded as aforesaid, without authority from said inspector, shall be punished by a fine of not less than ten nor more than fifty dollars for each offense."

TO PROHIBIT THE LOCKING OF DOORS DURING THE HOURS OF LABOR.

SECTION 1. No outside or inside doors of, any building, wherein operatives are employed, shall be so locked, bolted, or otherwise fastened, during the hours of labor, as to prevent free egress.

SEC. 2. Any person, firm or corporation being the owner, lessee or occupant of any such building who shall, after receiving five days' notice in writing from one of the inspectors of factories and public buildings, neglect or refuse to comply with the provisions of the preceding section, shall forfeit to the use of the Commonwealth not less than ten nor more than fifty dollars.

SEC. 3. The inspectors of factories and public buildings shall enforce the provisions of this act.

TO PROVIDE MEANS OF COMMUNICATION BETWEEN ROOMS WHERE MACHINERY IS PROPELLED BY STEAM AND ROOM WHERE ENGINEER IS STATIONED.

SECTION 1. In every manufacturing establishment where the machinery used is propelled by steam, communication shall be provided between each room where such machinery is placed and the room where the engineer is stationed, by means of speaking tubes, electric bells or such other means as shall be satisfactory to the inspectors of factories; *provided*, that in the opinion of the inspectors such communication is necessary.

SEC. 2. The inspectors of factories shall enforce the provisions of this act, and any person, firm or corporation being the occupant of any manufacturing establishment or controlling the use of any building or room where machinery propelled by steam is used, violating the provisions of this act shall forfeit to the use of the Commonwealth not less than twenty-five nor more than one hundred dollars; but no prosecution shall be made for such violation until four weeks after notice in writing by an inspector has been sent by mail to such person, firm or corporation of any changes necessary to be made to comply with the provisions of this act, nor then if in the meantime such changes have been made in accordance with such notification.

TO REPORT ACCIDENTS IN FACTORIES AND MANUFACTURING ESTABLISHMENTS.

SECTION 1. All manufacturers and manufacturing corporations shall forthwith send to the chief of the Massachusetts district police a written notice of any accident to an employe while at work in any factory or manufacturing establishment operated by them whenever the accident results in the death of said employe or causes bodily injury of such a nature as to prevent the person injured from returning to his work within four days after the occurrence of the accident.

SEC. 2. Any person or corporation violating any of the provisions of section one of this act shall be punished by a fine not exceeding twenty dollars.

SEC. 3. The chief of the Massachusetts district police shall keep a record of all accidents so reported to him, together with a statement of the name of the person injured, the city or town where the accident occurred, and the cause thereof, and shall include an abstract of said record in his annual report.

EMPLOYMENT OF CHILDREN.

SECTION 1. No child under thirteen years of age shall be employed at any time in any factory, workshop or mercantile establishment. No such child shall be employed in any indoor work, performed for wages or other compensation, to whomsoever payable during the hours when the public schools of the city or town in which he resides are in session, or shall be employed in any manner during such hours unless during the year next preceding such employment he has attended school for at least twenty weeks as required by law.

SEC. 2. No child under fourteen years of age shall be employed in any manner before the hour of six o'clock in the morning or after the hour of seven o'clock in the evening. No such child shall be employed in any factory, workshop or mercantile establishment, except during the vacation of the public schools in the city or town where he resides, unless the person or corporation employing him procures and keeps on file a certificate and employment ticket for such child as prescribed by section four of this act, and no such child shall be employed in any indoor work, performed for wages or other compensation, to whomsoever payable during the hours when the public schools of such city or town are in session, unless as aforesaid, or shall be employed in any manner during such hours unless during the year next preceding such employment he has attended school for at least twenty weeks as required by law; and such employment shall not continue in any case beyond the time when such certificate expires. The chief of the district police, with the approval of the governor, shall have authority to designate any kind or kinds of employment in factories, workshops or mercantile establishments as injurious to the health of children under fourteen years of age employed therein, and after one week's written notice from said chief to the employer or his superintendent, overseer or agent of such designation no such child shall be employed in any such kind or kinds of employment in any factory, workshop or mercantile establishments.

SEC. 3. No child under sixteen years of age shall be employed in any factory, workshop or mercantile establishment unless the person or corporation employing him procures and keeps on file the certificate required in the case of such child by the following section, and also keeps on file a full and complete list of such children employed therein.

SEC. 4. The certificate of a child under fourteen years of age shall not be signed until he presents to the person authorized to sign the same an employment ticket, as hereinafter prescribed, duly filled out and signed. The certificate and the employment ticket shall be separately printed, and shall be in the following forms respectively, and the blanks therein shall be filled out and signed as indicated by the words in brackets:

EMPLOYMENT TICKET, LAW OF 1888.

When [name of child], height [feet and inches], complexion [fair or dark], hair [color], presents a certificate duly signed, I intend to employ [him or her].

[Signature of intending employer or agent.]

[Town or city and state.]

AGE AND SCHOOLING CERTIFICATE, LAW OF 1888.

This certifies that I am the [father, mother or guardian] of [name of child], and that [he or she] was born at [name of town or city], in the county of [name of county, if known], [and state or country] of [name], on the [day and year of birth], and is now [number of years and months] old.

[Signature of father, mother or guardian.]

[Town or city and date.]

Then personally appeared before me the above named [name of person signing] and made oath that the foregoing certificate by [him or her] signed is true to the best of [his or her] knowledge and belief. I hereby approve the foregoing certificate of [name of child], height [feet and inches], complexion [fair or dark], hair [color], having no sufficient reason to doubt that [he or she] is of the age therein certified.

[Signature of person authorized to sign, with official character or authority.]

[Town or city and date.]

In case the age of the child is under fourteen, the certificate shall continue as follows, after the word "certified":

And I hereby certify that [he or she] can read at sight, and can write legibly, simple sentences in the English language, and that [he or she] has attended the [name] public [or private] day school according to law for [number of weeks, which must be at least twenty] weeks during the year next preceding this date, and that the last twenty weeks of such attendance began [date]. This certificate expires [date, one year later than above date.]

[Signature of the person authorized to sign, with official character or authority.]

If attendance has been at a private school, also signature of a teacher of such school, followed by words—certifying to school attendance.

[Town or city and date.]

In case a child cannot read and write, as above stated, the following may be substituted for the clause beginning "and I hereby certify" through to and including the word "language:" and I hereby certify that [he or she] is a regular attendant at the [name] public evening school;" but in such case the certificate shall only continue in force for as long a time as attendance of such child at such evening school is indorsed weekly during the session of such evening school, not exceeding the length of the public school year minus twenty weeks in place of attendance at day school as now provided by law, with a statement from a teacher thereof certifying that his attendance continues regular. If attendance has been at a half-time school, forty weeks of such attendance must be certified to instead of twenty. The foregoing certificate must be filled out in duplicate, and one copy thereof shall be kept on file by the school committee. Any explanatory matter may be printed with such certificate in the discretion of the school committee or superintendent of schools.

SEC. 5. In cities and towns having a superintendent of schools said certificate shall be signed only by such superintendent, or by some person authorized by him in writing; in other cities and towns it shall be signed by some member or members of the school committee authorized by vote thereof: *provided, however*, that no member of a school committee or other person authorized as aforesaid, shall have authority to sign such certificate for any child then in or about to enter, his own employment, or the employment of a firm of which he is a member, or of a corporation of which he is an officer or employe. The person signing the certificate shall have authority to administer the oath provided for therein, but no fee shall be charged therefor; such oath may also be administered by any justice of the peace.

SEC. 6. The certificate as to the birthplace and age of a child shall be signed by his father, if living, and a resident of the same city or town; if not, by his mother; or if his mother is not living, or if living is not a resident of the same city or town, by his guardian; if a child has no father, mother or guardian living in the same city or town, his own signature to the certificate may be accepted by the person authorized to approve the same.

SEC. 7. No child who has been continuously a resident of a city or town since reaching the age of thirteen years shall be entitled to receive a certificate that he has reached the age of fourteen unless or until he has attended school according to law in such city or town for at least twenty weeks since reaching the age of thirteen, unless exempted by law from such attendance. Before signing the approval of the certificate of age of a child, the person authorized to sign the same shall refer to the last school census taken under the provisions of section three of chapter forty-six of the Public Statutes, and if the name of such child is found thereon, and there is a material difference between his age as given therein and as given by his parent or guardian in the certificate, allowing for lapse of time, or if such child plainly appears to be of materially less age than that so given, then such certificate shall not be signed until a copy of the certificate of birth or of baptism of such child, or a copy of the register of its birth with a town or city clerk, has been produced, or other satisfactory evidence furnished that such child is of the age stated in the certificate.

SEC. 8. The truant officers may, when so authorized and required by vote of the school committee, visit the factories, workshops and mercantile establishments in their several cities and towns, and ascertain whether any children under the age of fourteen are employed therein contrary to the provisions of this act, and they shall report any cases of such illegal employment to the school committee and to the chief of the district police or the inspector of factories for the district. The inspectors of factories, and the truant officers when authorized as aforesaid, may demand the names of all the children under sixteen years of age employed in such factories, workshops and mercantile establishments, and may require that the certificates and lists of such children provided for in this act shall be produced for their inspection. Such truant officers shall inquire into the employment, otherwise than in such factories, workshops and mercantile establishments, of children under the age of fourteen years, during the hours when the public schools are in session, and may require that the aforesaid certificates of all children under sixteen shall be produced for their inspection; and any such officer, or any inspector of factories, may bring a prosecution against a person or corporation employing any such child otherwise than as aforesaid, during the hours when the public schools are in session, contrary to the provisions of this act, if such employment still continues one week after written notice from such officer or inspector that such prosecution will be brought or if more than one such written notice, whether relating to the same child or to any other child, has been given to such employer by a truant officer or inspector of factories at any time within one year.

SEC. 9. Every parent or guardian of a child under fourteen years of age who permits any employment of such child contrary to the provisions of this act, and every owner, superintendent or overseer of any factory, workshop or mercantile establishment who employs or permits to be employed therein any child contrary to the provisions of this act, and any other person who employs any child contrary to the provisions of this act, shall for every such offense forfeit not less than twenty nor more than fifty dollars for the use of the public schools of the city or town. Every parent, guardian, or person authorized to sign the certificate prescribed by section four of this act, who certifies to any materially false statement therein, shall be punished by a fine not exceeding fifty dollars, or by imprisonment not exceeding thirty days, or by both such fine and imprisonment. A failure to produce to a truant officer or inspector of factories the certificate required by the provisions of this act shall be *prima facie* evidence of the illegal employment of the child whose certificate is not produced.

SEC. 10. The expressions "factory" and "workshop" used in this act shall have the meanings defined for them respectively by chapter one hundred and three of the acts of the year one thousand eight hundred and eighty-seven.

SEC. 11. Within one month of the passage of this act the chief of the district police shall cause a printed copy thereof to be transmitted to the school committee of every city and town in the Commonwealth.

SEC. 12. Sections one to six, inclusive, of chapter forty-eight of the Public Statutes, chapter two hundred and twenty-four of the acts of the year eighteen hundred and eighty-three, chapter two hundred and twenty-two of the acts of the year eighteen hundred and eighty-five, and section one of chapter four hundred and thirty-three of the acts of the year eighteen hundred and eighty-seven are hereby repealed.

WEEKLY PAYMENT OF WAGES BY CORPORATIONS.

SECTION 1. Every manufacturing, mining or quarrying, mercantile, railroad, street railway, telegraph and telephone corporation, every incorporated express company and water company shall pay weekly each and every employe engaged in its business the wages earned by such employe to within six days of the date of said payment; and every incorporated city shall so pay every employe engaged in its business, unless such employe shall request in writing to be paid in some different manner; and every municipal corporation not a city, and every incorporated county shall so pay every employe engaged in its business if so required by him: *provided, however*, that if at any time of payment any employe shall be absent from his regular place of labor he shall be entitled to said payment at any time thereafter upon demand. The provision of this section shall not apply to any employe of a co-operative corporation or association who is a stockholder therein, unless such employe shall request such corporation to pay him weekly; and *provided, also*, that the railroad commissioners, after a hearing, may exempt any railroad corporation from paying weekly any of its employes who, in the opinion of the commissioners, prefer less frequent payments, and when, in their opinion, the interests of the public and such employes will not be injured thereby.

SEC. 2. Any corporation violating any of the provisions of this act shall be punished by a fine not exceeding fifty and not less than ten dollars on each complaint under which it is convicted: *provided*, complaint for such violation is made within thirty days from the date thereof. The chief of the district police, or any state inspector of factories and public buildings, may bring a complaint against any corporation which neglects to comply with the provisions of this act for a period of two weeks after having been notified in writing by such chief or inspector that such complaint will be brought. On the trial of such complaint such corporation shall not be allowed to set up any defense for a failure to pay weekly any employe engaged in its business the wages earned by such employe to within six days of the date of said payment, other than the attachment of such wages by the trustee process, or a valid assignment thereof, or a valid set-off against the same, or the absence of such employe from his regular place of labor at the time of payment, or an actual tender of such employe at the time of payment of the wages so earned by him. No assignment of wages payable weekly under the provisions of this act shall be valid if made to the corporation from whom such wages are to become due, or to any person on behalf of such corporation, or if made or procured to be made to any person for the purpose of relieving such corporation from the obligation to pay weekly under the provisions of this act.

SEC. 3. When a corporation against which a complaint is made under this act fails to appear after being duly served with process, its default shall be recorded, the allegations in the complaint taken to be true, and judgment shall be rendered accordingly.

SEC. 4. When judgment is rendered upon any such complaint against a corporation, the court may issue a warrant of distress to compel the payment of the penalty prescribed by law, together with the costs and interest.

SANITARY APPLIANCES AND VENTILATION.

SECTION 1. Every factory in which five or more persons are employed, and every factory, workshop, mercantile or other establishment or office in which two or more children, young persons or women are employed, shall be kept in a cleanly state and free from effluvia arising from any drain, privy or other nuisance, and shall be provided, within reasonable access, with a sufficient number of proper water-closets, earth-closets or privies for the reasonable use of the persons employed therein; and wherever two or more male persons and two or more female persons are employed as aforesaid together, a sufficient number of separate and distinct water-closets, earth-closets or privies shall be provided for the use of each sex and plainly so designated, and no person shall be allowed to use any such closet or privy assigned to persons of the other sex.

SEC. 2. It shall be the duty of every owner, lessee or occupant of any premises so used as to come within the provisions of this act to carry out the same and make the changes necessary therefor. In case such changes are made upon the order of an inspector of factories by the occupant or lessee of the premises, he may at any time within thirty days of the completion thereof bring an action before any trial justice, police, municipal or district court against any other person having an interest in such premises, and may recover such proportion of the expense of making such changes as the court adjudges should justly and equitably be borne by such defendant.

SEC. 3. When it appears to an inspector of factories that any act, neglect or default in relation to any drain, water-closet, earth-closet, privy, ash-pit, water supply, nuisance

or other matter in a factory or in a workshop, included under section one of this act, is punishable or remediable under chapter eighty of the Public Statutes, or under any law of the Commonwealth relating to the preservation of the public health, but not under this act, such inspector shall give notice in writing of such act, neglect or default to the board of health of the city or town within which such factory or workshop is situate, and it shall thereupon be the duty of such board of health to make inquiry into the subject of the notice, and to take such action thereon in the way of enforcing any provision of law within its authority as the facts may call for.

SEC. 4. Any person violating any provision of sections one and two of this act shall be punished by a fine not exceeding one hundred dollars; but no criminal prosecution shall be made for such violation until four weeks after notice in writing by an inspector of factories of the changes necessary to be made to comply with the provisions of said sections has been sent by mail or delivered to such person, nor then if in the meantime such changes have been made in accordance with such notification. A notice shall be deemed a sufficient notice under this section to all the members of a firm or to a corporation when given to one member of such firm, or to the clerk, cashier, secretary, agent or any other officer having charge of the business of such corporation, or to its attorney; and in the case of a foreign corporation, notice to the officer having the charge of such factory or workshop shall be sufficient; and such officer shall be personally liable for the amount of any fine in case a judgment against the corporation is returned unsatisfied.

SEC. 5. The following expressions used in this act shall have the following meaning:—

The expression "person" means any individual, corporation, partnership, company or association.

The expression "child" means a person under the age of fourteen years.

The expression "young person" means a person of the age of fourteen years and under the age of eighteen years.

The expression "woman" means a woman of eighteen years of age and upwards.

The expression "factory" means any premises where steam, water or other mechanical power is used in aid of any manufacturing process there carried on.

The expression "workshop" means any premises, room or place, not being a factory as above defined, wherein any manual labor is exercised by way of trade, or for purposes of gain in, or incidental to, any process of making, altering, repairing, ornamenting, finishing or adapting for sale any article or part of an article, and to which or over which premises, room or place the employer of the persons working therein has the right of access or control: *provided, however*, that the exercise of such manual labor in a private house or private room by the family dwelling therein, or by any of them, or in case a majority of the persons therein employed are members of such family, shall not of itself constitute such house or room a workshop within this definition.

The aforesaid expressions shall have the meanings above defined for them respectively in all laws of this Commonwealth relating to the employment of labor, whether heretofore or hereafter enacted, unless a different meaning is plainly required by the context.

PROPER VENTILATION OF FACTORIES AND WORKSHOPS.

SECTION 1. Every factory in which five or more persons are employed, and every workshop in which children, young persons or women, five or more in number, are employed, shall be so ventilated while work is carried on therein that the air shall not become so exhausted as to be injurious to the health of the persons employed therein, and shall also be so ventilated as to render harmless, so far as is practicable, all the gases, vapors, dust or other impurities generated in the course of the manufacturing process or handicraft carried on therein that may be injurious to health.

SEC. 2. If in a factory or workshop included in section one of this act any process is carried on by which dust is generated and inhaled to an injurious extent by the persons employed therein, and it appears to an inspector of factories that such inhalation could be to a great extent prevented by the use of a fan or other mechanical means, and that the same could be provided without excessive expense, such inspector may direct a fan or other mechanical means of a proper construction to be provided within a reasonable time, and such fan or other mechanical means shall be so provided, maintained and used.

SEC. 3. Any person employing labor in a factory or workshop and violating any provision of this act shall be punished by fine not exceeding one hundred dollars; but no criminal prosecution shall be made for any such violation unless such employer shall

have neglected for four weeks to make such changes in his factory or workshop as shall have been ordered by an inspector of factories by a notice in writing delivered to or received by such employer.

SANITARY PROVISIONS AND PROPER VENTILATION IN PUBLIC BUILDINGS AND SCHOOL-HOUSES.

SECTION 1. Every public building and every school-house shall be kept in a cleanly state and free from effluvia arising from any drain, privy, or other nuisance, and shall be provided with a sufficient number of proper water-closets, earth-closets or privies for the reasonable use of the persons admitted to such public building or of the pupils attending such school-house.

SEC. 2. Every public building and every school-house shall be ventilated in such a proper manner that the air shall not become so exhausted as to be injurious to the health of the persons present therein. The provisions of this section and the preceding section shall be enforced by the inspection department of the district police force.

SEC. 3. Whenever it shall appear to an inspector of factories and public buildings that further or different sanitary provisions or means of ventilation are required in any public building or school-house in order to conform to the requirements of this act, and that the same can be provided without incurring unreasonable expense, such inspector may issue a written order to the proper person or authority directing such sanitary provisions or means of ventilation to be provided, and they shall thereupon be provided in accordance with such order by the public authority, corporation or person having charge of, owning or leasing such public building or school-house.

SEC. 4. Any school committee, public officer, corporation or person neglecting for four weeks after the receipt of an order from an inspector, as provided in the preceding section, to provide the sanitary provisions or means of ventilation required thereby shall be punished by fine not exceeding one hundred dollars.

SEC. 5. The expression "public building" used in this act means any building or premises used as a place of public entertainment, instruction, resort or assemblage. The expression "school-house" means any building or premises in which public or private instruction is afforded to not less than ten pupils at one time.

WAY OF EGRESS AND MEANS OF ESCAPE FROM FIRE IN CERTAIN BUILDINGS.

SECTION 1. Every building now or hereafter used, in whole or in part, as a public building, public or private institution, school-house, church, theatre, public hall, place of assemblage or place of public resort, and every building in which ten or more persons are employed above the second story in a factory, workshop or mercantile or other establishment, and every hotel, family hotel, apartment-house, boarding-house, lodging-house or tenement-house in which ten or more persons lodge or reside above the second story, and every factory, workshop, mercantile or other establishment, the owner, lessee or occupant of which is notified in writing by the inspector hereinafter mentioned that the provisions of this act are deemed by him applicable thereto, shall be provided with proper ways of egress, or other means of escape from fire, sufficient for the use of all persons accommodated, assembling, employed, lodging or residing in such building; and such ways of egress and means of escape shall be kept free from obstruction, in good repair and ready for use. Every room above the second story in any such building in which ten or more persons are employed shall be provided, if the inspector mentioned in the following section shall so direct in writing, with more than one way of egress by stairways on the inside or outside of the building, placed as near as practicable at opposite ends of such room; stairways on the outside of the building shall have suitable railed landings at each story above the first, and shall connect with each story by doors or windows; and such landings, doors and windows shall be kept clear of ice and snow and other obstructions. Women or children shall not be employed in a factory, workshop or mercantile or other establishment, in a room above the second story from which there is only one way of egress, if the inspector mentioned in the following section shall so direct in writing. All doors and windows in any building subject to the provisions of this section shall open outwardly if the inspector mentioned in the following section shall so direct in writing. No portable seats shall be allowed in the aisles or passage-ways of such building during any service or entertainment held therein. The proscenium or curtain opening of all theatres shall have a fire-resisting curtain of some incombustible material, and such curtain shall be properly constructed and shall be operated by proper mechanism; the certificate of the inspector mentioned in the following section shall be conclusive evidence of a compliance with such requirements.

SEC. 2. It shall be the duty of such inspectors of factories and public buildings, as may be assigned to such duty by the chief of the district police force, to examine, as soon as may be after the passage of this act, and thereafter from time to time, all buildings within his district subject to the provisions of this act, and it shall be the duty of the inspector of buildings of the city of Boston so to examine all such buildings within said city. In case any such building conforms, in the judgment of such inspector, to the requirements of this act, he shall issue to the owner, lessee or occupant of such building, or of any portion thereof used as above mentioned in section one, a certificate to that effect, specifying the number of persons for whom the ways of egress or means of escape from fire are deemed to be sufficient. Such certificate shall be conclusive evidence, as long as it continues in force, of a compliance on the part of the person to whom it is issued with the provisions of this act. But such certificate shall be of no effect in case a greater number of persons than therein specified are accommodated or employed, or assemble, lodge or reside within such building or portion thereof, or in case such building is used for any purposes materially different from those for which it was used at the time of the granting thereof, or in case the internal arrangements of such building are materially altered, or in case any ways of egress or means of escape from fire existing in such building at the time of such granting are stopped up, rendered unavailable or materially changed; and in no case shall such certificate continue in force for more than five years from its date. Such certificate may be revoked by such inspector at any time upon written notice to the person holding the same, or occupying the premises for which it was granted, and shall be so revoked whenever, in his opinion, any conditions or circumstances have so changed that the existing ways of egress and means of escape are no longer proper and sufficient. A copy of the said certificate shall be kept posted in a conspicuous place upon every floor of such building by the person occupying the premises covered thereby.

SEC. 3. Upon an application being made to an inspector for the granting of a certificate under this act, he shall issue to the person making the same an acknowledgment that such certificate has been applied for, and pending the granting or refusal of such certificate, such acknowledgment shall have for a period of ninety days the same effect as such certificate, and such acknowledgment may be renewed by such inspector with the same effect for a further period not exceeding ninety days, and may be further renewed by the chief of the district police, until such time as such certificate shall be granted or refused.

SEC. 4. In case any change is made in any premises for which a certificate has been issued under this act, whether in the use thereof or otherwise, such as terminates the effect of such certificate, as above provided in section two, it shall be the duty of the person making the same to give written notice thereof forthwith to the inspector for the district, or chief of the district police, if such premises are outside of the city of Boston, or to the inspector of buildings of the city of Boston, if within said city.

SEC. 5. In case any building or portion thereof subject to the provisions of this act is found by an inspector to fail to conform thereto, or in case any change is made in such building or portion thereof, such as terminates the effect of a certificate formerly granted therefor as aforesaid, it shall be the duty of such inspector to give notice in writing to the owner, lessee or occupant of such building, specifying and describing what additional ways of egress or means of escape from fire are necessary, in the opinion of such inspector, in order to conform to the provisions of this act and to secure the granting of a certificate as aforesaid. Notice to any agent of such owner, lessee or occupant in charge of the premises shall be sufficient notice under this section to such owner, lessee or occupant.

SEC. 6. In case any building subject to the provisions of this act is owned, leased or occupied, jointly or in severalty, by different persons, any one of such persons shall have the right to apply to any part of the outside of such building, and to sustain from any part of the outside wall thereof, any way of egress or means of escape from fire specified and described by an inspector as above provided, notwithstanding the objection of any other such owner, lessee or occupant; and any such way of egress or means of escape may project over the highway.

SEC. 7. When a license is required by law or municipal ordinance, in order to authorize any premises to be used for any purpose mentioned in section one, no license for such purpose shall be granted until a certificate for such building or portion thereof shall first have been obtained from an inspector as above provided, and no such license hereafter issued shall continue in force any longer than such certificate remains in force.

SEC. 8. No wooden flue or air duct for heating or ventilating purposes shall hereafter be placed in any building subject to the provisions of section one of this act, and no pipe for conveying hot air or steam in such building shall be placed, or shall remain

placed, nearer than one inch to any wood-work unless protected to the satisfaction of the said inspector by suitable guards or casings of incombustible material.

SEC. 9. Every story above the second of a building subject to the provisions of section one shall be supplied with means of extinguishing fire, consisting either of pails of water or other portable apparatus, or of hose attached to a suitable water supply and capable of reaching any part of such story; and such means of extinguishing fire shall be kept at all times ready for use and in good condition.

SEC. 10. It shall be the duty of such members of the inspection department of the district police force as may be assigned to such duty by the chief of such force to enforce the provisions of this act outside of the city of Boston, and of the inspector of buildings of the city of Boston to enforce the same within said city, and for such purpose such inspectors shall have the right of access to all parts of any buildings subject to the provisions of this act.

SEC. 11. Cities may, by ordinance, provide that the provisions of this act shall apply to any buildings three or more stories in height within their respective limits.

SEC. 12. It shall be the duty of every owner, lessee or occupant of any building or part thereof, subject to this act, to cause the provisions thereof to be carried out, and any owner, lessee or occupant failing to observe such provisions shall be subject to a fine of not less than fifty nor more than one thousand dollars; but no prosecution therefor shall be brought until four weeks after written notice from an inspector, as above provided, of the changes necessary to be made in order to conform thereto, nor then if in the meantime such changes have been made in accordance with such notification. Notice to one member of a firm, or to the clerk or treasurer of a corporation or to the person in charge of the premises, shall be deemed sufficient notice thereunder, and such notice may be given in person or by mail. Any such owner, lessee or occupant shall be liable for all damages caused by his violation of the provisions of this act. Any person using or occupying a building contrary to the provisions of this act may be enjoined from such use or occupation in a proceeding to be had before the superior court or the supreme judicial court at the instance of the inspector, and upon the filing of a petition therefor any judge or justice of the court in which such proceeding is pending may issue a temporary injunction or restraining order, as provided in proceedings in equity.

SEC. 13. The governor of the Commonwealth is hereby authorized to appoint from time to time, as may be necessary, not exceeding ten additional members of the inspection department of the district police force, qualified to perform the duties of the members of such department.

ERECTION AND CONSTRUCTION OF CERTAIN BUILDINGS.

SECTION 1. No building designed to be used in whole or in part, as a public building, public or private institution, school-house, church, theater, public hall, place of assemblage or place of public resort, and no building more than two stories in height designed to be used above the second story, in whole or in part, as a factory, workshop or mercantile or other establishment and having accommodations for ten or more employes above said story, and no building more than two stories in height designed to be used above the second story, in whole or in part as a hotel, family hotel, apartment house, boarding house, lodging house or tenement-house and having ten or more rooms above said story, shall hereafter be erected, unless in process of erection at the date of the passage of this act, until a copy of the plans of such building has been deposited with the inspector of factories and public buildings for the district in which such building is to be located, if outside of the city of Boston, or with the inspector of buildings of the city of Boston, if within said city, together with a copy of such portion of the specifications of such building as such inspector may require, nor shall any such building be so erected without the provision of sufficient ways of egress and other means of escape from fire, properly located and constructed; the certificate of the inspector above named indorsed, if the building is to be located outside the city of Boston, with the approval of the chief of the district police force, shall be conclusive evidence of a compliance with the provisions of this act, provided that after the granting of such certificate no change is made in the plans or specifications of such ways of egress and means of escape unless a new certificate is obtained therefor. Such inspector may require that proper fire-stops shall be provided in the floors, walls and partition of such buildings, and may make such further requirements as may be necessary or proper to prevent the spread of fire therein or its communication from any steam boiler or heating apparatus; and no pipe for conveying hot air or steam in such building shall be

placed nearer than one inch to any wood-work, unless protected to the satisfaction of such inspector by suitable guards or casings of incombustible material, and no wooden flue or air-duct for heating or ventilating purposes shall be placed in any such building.

SEC. 2. Any person erecting or constructing a building in violation of the provisions of this act shall be punished by fine of not less than fifty nor more than one thousand dollars, and such erection or construction may be enjoined in a proceeding to be had before the superior or supreme judicial court at the instance of the inspector above named, and upon the filing of a petition of such injunction any justice of the court in which such proceeding is pending may issue a temporary injunction or restraining order, as provided in proceedings in equity.

INSPECTION IN CERTAIN CASES OF BUILDINGS AND OTHER STRUCTURES ALLEGED TO BE UNSAFE OR DANGEROUS.

SECTION 1. Any member of the inspection department of the district police force, when called upon by the mayor or aldermen of any city, except the city of Boston, or by the selectmen of a town, shall inspect any building or other structure or anything attached to or connected therewith in such city or town which has been represented to be unsafe or dangerous to life or limb.

SEC. 2. If it appears to an inspector upon such inspection that the building or other structure or anything attached to or connected therewith is unsafe or dangerous to life or limb, in case of fire or otherwise, he shall proceed to cause the same to be removed or to render the same safe and secure, in the manner provided by sections four to eleven, inclusive, of chapter one hundred and four of the public statutes, and may cause proceedings to be instituted under section twelve of said chapter one hundred and four.

SEC. 3. The words "mayor and aldermen" in section five of said chapter one hundred and four shall, for the purposes of this act, be construed to apply to the mayor and aldermen of a city or the selectmen of a town, as the case may be.

SEC. 4. If in any city or town in which such inspection is made there is no city engineer or chief engineer of the fire department, the mayor and aldermen or selectmen, as the case may be, shall designate some other officer or officers or some suitable persons in place of the officers so named to act upon the board of survey provided for in section six of said chapter one hundred and four, and the provisions of said section, and of sections seven, eight, nine, ten and twelve of said chapter one hundred and four shall apply to a board thus constituted.

TO SECURE BETTER PROVISIONS FOR ESCAPE FROM HOTELS AND CERTAIN OTHER BUILDINGS IN CASE OF FIRE.

SECTION 1. Every keeper of a hotel, boarding or lodging house containing one hundred or more rooms, and being four or more stories high, shall have therein at least two competent watchmen, each properly assigned, and each on duty between the hours of nine o'clock in the afternoon and six o'clock in the forenoon. And every keeper of a hotel, boarding or lodging house, containing fifty or more, but less than one hundred rooms, and being three stories high, shall have between said hours at least one competent watchman on duty therein. And in all such hotels or lodging houses as are mentioned in this section, the halls and stairways shall be properly lighted at night, and at the head and foot of each flight of stairs shall be kept during the night a red light; and one or more proper alarms or gongs, capable of being heard throughout the house, shall always remain easy of access and ready for use in each of said buildings, to give notice to the inmates in case of fire. And every keeper of such hotel, boarding or lodging house shall keep posted in a conspicuous place in every sleeping-room, a notice descriptive of such means of escape.

SEC. 3. The inspector of buildings in the city of Boston, the mayor and aldermen of other cities, and the selectmen of towns, shall prescribe as they deem necessary, except so far as is specifically required in the preceding sections, what additional night-watch shall be kept, and what further provisions for the prevention of fires, and for the better protection of life in case of fire, shall be made by the several keepers of hotels, boarding or lodging houses within their respective limits; and no license shall be granted to any keeper of a hotel embraced in the provisions of this act, until the requirements thereof, so far as applicable, have been complied with.

SEC. 4. Whoever neglects or refuses to provide watchmen as required by this act shall be punished by a fine not exceeding one thousand dollars for each offense, and whoever violates any of the other provisions of this act shall be subject to the same penalty as is prescribed in section twenty-two of chapter one hundred and four of the public statutes.

SAFETY APPLIANCES IN HOTELS AND PUBLIC BUILDINGS.

SECTION 1. All hotels, boarding and lodging houses, subject to the provisions of chapter two hundred and fifty-one of the acts of the year eighteen hundred and eighty-three, adopting a system of electric watch-clocks that shall register at the office the movements of a watchman throughout the house, or adopting in the rooms any system of thermostats or fire-alarm bells that shall be approved by the inspector of factories and public buildings, or in the city of Boston by the inspector of buildings, shall be exempt from maintaining more than one watchman in addition to the regular night clerk and porters.

SEC. 2. The provisions of this act, and of said chapter two hundred and fifty-one of the acts of the year eighteen hundred and eighty-three, shall apply to family hotels.

AMENDATORY ACT RELATING TO THE DUTIES AND POWERS OF INSPECTORS.

SECTION 1. Section ten of chapter one hundred and three of the public statutes is hereby amended so as to read as follows: , Section 10. Such inspectors shall enforce the provisions of sections thirteen to twenty-two, inclusive, of chapter one hundred and four, except as therein specified, and the various provisions of law relating to the employment of women and minors in manufacturing, mechanical or mercantile establishments, and the employment of children, young persons or women in factories or workshops, and the ventilation of factories or workshops, and the securing of proper sanitary provisions in factories or workshops; and for this purpose said inspectors may enter all buildings used for public or manufacturing purposes, or for factories or workshops, examine the methods of protection from accident, the means of escape from fire, the sanitary provisions and the means of ventilation, and may make investigations as to the employment of children, young persons and women.

NEW JERSEY.

LAW RELATING TO THE EMPLOYMENT OF CHILDREN.

1. *Be it enacted by the Senate and General Assembly of the State of New Jersey, That* after the fourth day of July, one thousand eight hundred and eighty-three, no boy under the age of twelve years, nor any girl under fourteen years of age, shall be employed in any factory, workshop, mine, or establishment where the manufacture of any goods whatever is carried on.

2. *And be it enacted, That* on and after the first day of July, one thousand eight hundred and eighty-four, no child between the ages of twelve and fifteen years shall be employed in any factory, workshop, mine, or establishment where the manufacture of any kind of goods whatever is carried on, unless such child shall have attended, within twelve months immediately preceding such employment, some public day or night school, or some well recognized private school; such attendance to be for five days or evenings every week during a period of at least twelve consecutive weeks, which may be divided into two terms of six consecutive weeks each, so far as the arrangement of school terms will permit, and unless such child or its parents or guardian, shall have presented to the manufacturer, merchant or other employer seeking to employ such child, a certificate giving the name of his parents or guardian, the name and number of schools attended and the number of weeks in attendance, such certificate to be signed by the teacher or teachers of such child; *provided*, that in case the age of the child be not known, such teacher shall certify that the age given is the true age, to the best of his or her knowledge and belief; *provided*, that in case of orphan children, where necessity may seem to require, the guardian or others having charge of the same may, upon application to the inspector provided for in this act, receive from him a permit for the employment of such child or children, under such regulations as the said inspector may prescribe.

3. *And be it enacted, That* no child or children under the age of fourteen years shall be employed in any factory, workshop, mill or establishment where the manufacture of any kind of goods is carried on, for a longer period than an average of ten hours in a day, or sixty hours in a week.

4. *And be it enacted, That* every manufacturer, merchant or other employer employing any person contrary to the provisions of this act, or who shall be guilty of any violation hereof, shall be guilty of misdemeanor, and upon conviction be fined for each

offense in a sum of not less than fifty nor more than one hundred dollars, and in default of payment of the same shall be imprisoned in the county jail for not less than thirty nor more than ninety days; and that every head of a family, parent or guardian, who knowingly permits the employment of such children shall be likewise subject to a fine of not more than twenty-five nor less than ten dollars for every child so employed, and for each offense, and in default of such payment shall be imprisoned in the county jail for a period of not less than ten days nor more than twenty days; a certificate of the age of the minor, made by him or her, and by his or her parents or guardian at the time of employment, shall be conclusive evidence of the age of such minor upon any trial for the violation of this act; *provided*, that the provisions in this act in relation to the hours of employment shall not apply to or affect any person engaged in preserving perishable goods in fruit-canning establishments.

5. *And be it enacted*, That the governor shall, immediately after the passage of this bill, appoint, with the advice and consent of the senate, some suitable person, who shall be a resident and citizen of this state, as inspector, at a salary of twelve hundred dollars per year, to be paid monthly, whose term of office shall be for three years; the said inspector shall be empowered to visit and inspect, at all reasonable hours and as often as practicable, the factories, workshops, mines and other establishments in the state where the manufacture and sale of any kind of goods is carried on, and to report to the governor of this state, on or before the thirty-first day of October in each year; it shall also be the duty of said inspector to enforce the provisions of this act and prosecute all violations of the same in any recorders' courts of cities, and justices of the peace, or other courts of competent jurisdiction in the state.

6. *And be it enacted*, That all necessary expenses incurred by said inspector in the discharge of his duty shall be paid from the funds of the state upon the presentation of proper vouchers of the same; *provided*, that not more than five hundred dollars shall be expended by him in any one year.

7. *And be it enacted*, That all fines collected under this act shall inure to the benefit of the school fund of the district where the offense has been committed.

SUPPLEMENTARY ACT.

That the inspector and his deputies shall have power to demand a certificate of physical fitness from some regular practicing physician in the case of minors who may seem physically unable to work, and shall have power to prohibit the employment of any minor that cannot obtain such a certificate.

That any parent or guardian, who, when so required by the inspector, or one of his deputies, shall furnish to such inspector, or deputy, a certificate from the office of registration of births, or in the absence of such certificate, an affidavit or affidavits of the age of such minor; and if any one shall knowingly swear falsely in any such affidavit, the person or persons so swearing shall be guilty of perjury and liable to indictment and punishment accordingly.

That section four of the act to which this is a supplement shall be amended to read as follows:

4. [*And be it enacted*, That every manufacturer, merchant, or other employer, employing any person contrary to the provisions of this act, or who shall be guilty of any violation thereof, shall be liable to a penalty of fifty dollars for each offense, to be recovered in an action of debt in any district court in any city, or before any justice of the peace having due jurisdiction, and that any parent or guardian who knowingly permits the employment of such child or children shall be liable in like action to a penalty of not more than fifty dollars, as the court shall fix; that such action shall be prosecuted in the name of the inspector; the trial shall proceed as other actions of debt, and the first process shall be a summons returnable in not less than five days or more than ten days after issue, and it shall not be necessary to indorse the same as in *qui tam* actions; the finding of the court shall be that the defendant has or has not, as the case may be, incurred the penalty claimed in the demand of the plaintiff, and judgment shall be given accordingly; in case an execution shall issue and be returned unsatisfied, the court, on application, after notice to the defendant, may award an execution to take the body of the defendant, and in case such a defendant is committed under such an execution he shall not be discharged under the insolvent laws of the state, but shall only be discharged by the court making the order for the body execution or one of the justices of the supreme court, when such court or justice shall be satisfied that further confinement will not accomplish the payment of the judgment and costs; an affidavit of the age of any minor made by its parent or guardian, at the time of its employment, shall be conclusive evidence of the age

of such minor, upon any trial against a manufacturer or employer for the violation of this act, but any parent or guardian that shall knowingly swear falsely in such affidavit shall be guilty of perjury, and the inspector or deputy inspector shall be authorized, in case they shall find any minor employed under any false affidavit given as aforesaid, to order and compel such minor to desist from work; the provisions of this act in relation to the hours of employment shall not apply to or affect any person engaged in preserving perishable goods in fruit-canning establishments.]

COMPULSORY EDUCATION LAW.

1. *Be it enacted by the Senate and General Assembly of the State of New Jersey,* That all parents and those who have care of children shall instruct them, or cause them to be instructed, in spelling, reading, writing, English grammar, geography and arithmetic; and every parent, guardian or other person having control and charge of any child or children between the ages of seven and twelve years shall be required to send any such child or children to a public day school for a period of at least twenty weeks in each year, eight weeks, at least, of which attendance shall be consecutive, unless such child or children are excused from such attendance by the board of the school district in which such parents or guardians reside, upon its being shown to their satisfaction that the bodily or mental condition of such child or children has been such as to prevent his, her or their attendance at school, or that such child or children are taught in a private school, or at home, by some qualified person or persons, in such branches as are usually taught in primary schools.

2. *And be it enacted,* That no child under the age of fifteen years shall be employed by any person, company or corporation to labor in any business whatever, unless such child shall have attended, within twelve months immediately preceding such employment, some public day or night school, or some well recognized private school; such attendance to be for five days or evenings every week during a period of at least twelve consecutive weeks, which may be divided into two terms of six consecutive weeks each, so far as the arrangement of school terms will permit, and unless such child, or his or her parents or guardian, shall have complied with the provisions of the act approved March fifth, eighteen hundred and eighty-three, limiting the employment hours of the labor of children.

3. *And be it enacted,* That every parent, guardian or other person having charge or control of any child from twelve to sixteen years of age, who has been temporarily discharged from employment in any business in order to be afforded an opportunity to receive instruction or schooling, shall send such child to some public or private day school for the period for which such child shall have been discharged, unless such child shall have been excused from such attendance by the inspector of factories and workshops, or by the board of the school district, for reasons as stated in section one hereof.

4. *And be it enacted,* That in case any parent, guardian or other person shall fail to comply with the provisions of sections one and three of this act, such parent, guardian or other person shall be deemed guilty of a misdemeanor, and shall, on conviction, be liable to a fine of not less than ten dollars nor more than twenty-five dollars for the first offense, and of not less than twenty-five dollars for each subsequent offense, or to imprisonment for not less than one month or more than three; the said fines, when paid, to be added to the public school money of said school district in which the offense occurred.

5. *And be it enacted,* That all children between the ages of seven and fifteen years, who are habitual truants from school, or who, while in attendance at any public school are incorrigible, vicious or immoral in conduct, and all children between the said ages who absent themselves habitually from school, and habitually wander about streets and public places during school hours, having no business or lawful occupation, shall be deemed juvenile disorderly persons and subject to the provisions of this act.

6. *And be it enacted,* That in all cities having a duly organized police force, it shall be the duty of the police authority, at the request of the inspectors of factories and workshops, or of the school authority, to detail one or more members of said force to assist in the enforcement of this act; and in districts having no regular police force, subject to this act, it shall be the duty of the board of education, or the school district officers, to designate one or more constables of said city, township or village, whose duty it shall be to assist in the enforcement of this act, as occasion may require, and said board of education shall fix and determine the compensation to be paid such police officer or constable for the performance of his duties under the act; members of any police force or any constable designated to assist in the enforcement of this act, as provided in this section, shall be known as truant officers; *provided,* that in districts where no constable resides, the said board shall have power to appoint some other suitable person as truant officer.

7. *And be it enacted*, That it shall be the duty of any such truant officer or officers detailed to enforce the provisions of this act to examine into all cases of truancy, when requested so to do by the inspectors of factories and workshops, or by a district school board, and to warn such truants, their parents or guardians, in writing, of the final consequences of truancy, if persisted in, and also to notify the parent, guardian or other person having the legal charge and control of any juvenile disorderly person, that the said person is not attending any school, and to require said parent, guardian or other person to cause the said child to attend some recognized school within five days from said notice, and it shall be the duty of said parent, guardian or other person having the legal charge and control of said child to cause the attendance of said child at some recognized school; if said parent, guardian or other person having the legal charge and control of said child shall willfully refuse, fail or neglect to cause said child to attend some recognized school, it shall be the duty of said officer to make or cause to be made a complaint against said parent, guardian or other person having the legal control and charge of such child, in any court of competent jurisdiction in the school district in which the offense occurred, for such refusal or neglect, and upon conviction thereof said parent, guardian or other person, as the case may be, shall be punished by a fine of not less than ten dollars nor more than twenty-five dollars, or the court may, in its discretion, require the persons so convicted to give bond in the penal sum of one hundred dollars, with one or more sureties, to be approved by said court, conditioned that said person so convicted shall cause the child or children under his or her legal charge or control to attend some recognized school within five days thereafter, and to remain at said school during the term prescribed by law; *provided*, that if said parent, guardian or other person in charge of said child, shall prove inability to cause said child to attend said recognized school, then said parent or guardian, or other person, shall be discharged, and said court shall, upon complaint of said truant officer or other person that said child is a juvenile disorderly person, as described in section five of this act, proceed to hear such complaint, and if said court shall determine that said child is a juvenile disorderly person within the meaning of this act, then said court shall thereupon sentence said child to a juvenile reformatory until such child shall arrive at the age of sixteen years, unless sooner discharged by the board of control of said juvenile reformatory; *provided, however*, that such sentence may be suspended, in the discretion of said court, for such time as the child shall regularly attend school and properly deport himself or herself; it is further provided, that if for any cause the parent or guardian, or other person having charge of any juvenile disorderly person, as defined in this act, shall fail to cause such juvenile disorderly person to attend said recognized school, then complaint against such juvenile disorderly person may be made, heard, tried and determined, in the same manner as is provided for in case the parent pleads inability to cause said juvenile disorderly person to attend said recognized school; and it is further provided, that no child under the age of nine years shall be sent to a juvenile reformatory under the provisions of this act.

8. *And be it enacted*, That it shall be the duty of the officers empowered, detailed or appointed under the provisions of this act to assist in the enforcement thereof, to institute, or cause to be instituted, proceedings against any parent, guardian, or other person having legal charge and control of any child, or any person, company or corporation violating any of the provisions of the sections of this act; *provided*, this law shall not be operative in those school districts of the State, where there are not sufficient accommodations to seat children compelled to attend school under the provisions of this act; and that no prosecution shall be instituted against any parent, guardian or child unless they have received due notification from an officer empowered under this act that they are acting in violation of the provisions of this act.

9. *And be it enacted*, That when there is not within the distance of two miles from the factory or shop in which a child under the age of fifteen years is employed, or from the residence of the child, a recognized efficient school, attendance at a school temporarily approved by an inspector of factories and workshops shall, for the purpose of this act, be deemed attendance at a recognized, efficient school, and the inspector of factories shall immediately report to the education department every case of the approval of a school by him under this section.

10. *And be it enacted*, That two weeks' attendance of children between twelve and fifteen years of age at a recognized half-time or evening school shall, for all purposes of this act, be counted as one week at a day school.

11. *And be it enacted*, That when any of the provisions of this act are violated by a corporation, proceedings may be had against any of the officers or agents of said corporation who, in any way, participate in or are cognizant of such violation by the corporation of which they are the officers or agents, and said officers or agents shall be subject to the same penalties as individuals similarly offending.

GENERAL FACTORY ACT.

1. *Be it enacted by the Senate and General Assembly of the State of New Jersey*, That any person or corporation engaged in manufacturing, which requires from persons in his or its employ, under penalty of forfeiture of a part of the wages earned by them, a notice of intention to leave such employ, shall be liable to the payment of a like forfeiture if he or it discharges without similar notice a person in such employ, unless in case of a general suspension of labor in his or its shop or factory.

2. *And be it enacted*, That all accidents in workshops, factories, or mines, which result in death, shall be reported at once by the occupier to the inspector of workshops at Trenton, and the city or district physician, where one is employed as such, which notice may be given by mail.

3. *And be it enacted*, That the belting, shafting, gearing, and drums in all factories and workshops, when so placed as to be dangerous to persons employed therein while engaged in their ordinary duties, shall be securely guarded when practicable (possible); if otherwise, then notice of its danger shall be conspicuously posted in the factory or workshop.

4. *And be it enacted*, That no minor under eighteen years of age, or woman, shall be required to clean any part of the mill gearing or machinery in any factory or workshop while the same is in motion, or work between the fixed or traversing part of any machine while it is in motion by the action of steam, water or other mechanical power.

5. *And be it enacted*, That the openings of all hoistways, hatchways, elevators, and well-holes upon every floor of a factory, or mercantile or public building, shall be protected by good and sufficient trap-doors or self-closing hatches and safety-catches, or strong guard-rails at least three feet high, and all due diligence shall be used to keep such trap-doors closed at all times, except when in actual use by the occupant of the building having the use and control of the same.

6. *And be it enacted*, That no explosive or inflammable compound shall be used in any factory in such place and manner as to obstruct or render hazardous the egress of operatives in case of fire.

7. *And be it enacted*, That no minor under the age of sixteen shall be employed in any manufacturing, mercantile or mechanical establishment more than ten hours a day or sixty hours a week.

8. *And be it enacted*, That suitable places shall be provided in all factories and workshops where girls or women are employed, where unclean work of any kind has to be performed, for such girls or women to wash and dress, and that stairs in use by female employes in all factories and workshops be properly screened.

9. *And be it enacted*, That separate water-closets be provided for the use of employes of either sex in all manufacturing, mercantile and mechanical establishments where both sexes are employed.

10. *And be it enacted*, That where the factories or workshops appear so overcrowded that, in the opinion of the inspectors of factories, there is danger to health, the inspectors shall have power, after being supported in their opinion by some reputable resident physician, to prohibit such overcrowding.

11. *And be it enacted*, That the inspector of factories shall have power to order a fan or other mechanical means of proper construction, if practicable, for the purpose of preventing the inhalation of dust in establishments where any process is carried on by which dust is generated and inhaled by the workers to an injurious extent.

12. *And be it enacted*, That all factories and mines be ventilated so as to render harmless all impurities as near as may be.

13. *And be it enacted*, That no cellar, room, or place shall be occupied as a bake-house which is less than one-half of its height above the level of the street, foot-way, or ground adjoining the same, unless the following regulations are complied with: First, no water-closet, earth-closet, privy, or ash-pit shall be within or communicate directly with the bake-house; second, no drain or pipe for carrying off sewerage or other impure matter shall have an opening within a bake-house, unless such drain or pipe be trapped with a six-inch water-seal, both within and without the wall of the bake-house, and have a ventilating pipe of one-half the size of drain pipe between the wall and the outer trap, and which ventilating pipe shall run two feet above the roof of building.

14. *And be it enacted*, That the sleeping places for workmen and others employed in bake-houses shall be separate and distinct from the places used for the making of bread.

15. *And be it enacted*, That any person or corporation, being the owner, lessee, or occupant of any manufacturing establishment, factory, mine, workshop, or store, or owning

or controlling the use of any building or room, shall, for the willful violation of any provision of this act, except sections one and two, be liable to a penalty of fifty dollars for each offense, to be recovered in an action of debt in any district court in any city, or before any justice of the peace having due jurisdiction, and that any employee who shall be guilty of any violation of the provisions of this act shall be liable in a like action to a penalty of fifty dollars; that such action shall be prosecuted by and in the name of the inspector of factories; the trial shall proceed as other actions of debt, and the first process shall be a summons returnable in not less than five days or more than ten after issue, and it shall not be necessary to indorse the same as in *qui tam* actions; the finding of the court shall be that the defendant has or has not, as the case may be, incurred the penalty claimed in the demand of the plaintiff, and judgment shall be given accordingly; in case an execution shall issue and be returned unsatisfied, the court, on application, after notice to the defendant, may award an execution to take the body of the defendant, and in case such defendant is committed under such an execution, he shall not be discharged under the insolvent laws of the state, but shall only be discharged by the court making the order for the body execution, or one of the justices of the supreme court, when such court or justice shall be satisfied that further confinement will not accomplish the payment of the judgment and costs; *provided*, nothing herein shall subject any owner of a building or premises to any penalty unless he shall be the proprietor of the business conducted therein.

SUPPLEMENTARY ACT.

1. *Be it enacted by the Senate and General Assembly of the State of New Jersey*, That every person shall, within one month after he begins to occupy a factory or workshop, notify one of the factory inspectors of such occupancy.

2. *And be it enacted*, That section two of the act to which this is a supplement be amended to read, viz.: 2. *And be it enacted*, That all accidents in workshops, factories or mines, which prevent the injured person or persons from returning to work within two weeks, or which result in death, shall, within twenty-four hours after the expiration of such two weeks, or after the death, as the case may be, be reported by the person in charge of such workshop, factory or mine to one of the factory inspectors and to the city or district physician, where there is such an officer, which notice may be given by mail.

3. *And be it enacted*, That section six of the act to which this is a supplement be amended to read as follows: *And be it enacted*, That no minor or woman shall clean any part of the mill gearing or machinery in any factory or workshop while the same is in motion, or work between the fixed or traversing parts of any machine while it is in motion by the action of steam, water, or other mechanical power.

4. *And be it enacted*, That all factories, manufacturing establishments or workshops of two or more stories in height, in which thirty (30) or more persons are employed above the first floor thereof shall be provided with one or (if the proper officials deem necessary) more outside iron fire-escapes, not less than six feet in length and three feet in width, properly and safely constructed, guarded by iron railings not less than three feet in height, and taking in at least two windows at each story, and connected with the interior by easily accessible and unobstructed openings; and the said fire-escape shall connect by iron stairs, not less than twenty-four inches wide, the steps to be set not less than six inches tread, placed at not more than an angle of forty-five degrees slant, and protected by a well-secured hand-rail on both sides, with a twelve-inch wide drop ladder from the lower platform reaching to the ground.

5. *And be it enacted*, That for every twenty persons employed on every floor above the second floor of every factory or workshop there shall be one rope or portable fire-escape, and that each story shall be amply supplied with means for extinguishing fire.

6. *And be it enacted*, That all the main doors, both inside and outside, in factories, shall open outwardly, when the inspectors of factories in writing, so direct, and that no outside or inside door of any building wherein operatives are employed shall be so locked, bolted, or otherwise fastened during the hours of labor as to prevent egress.

7. *And be it enacted*, That no minor below the age of sixteen shall be employed at any work dangerous to health without a certificate of fitness from a reputable physician.

8. *And be it enacted*, That factories and workshops in which women and children are employed, and where dusty work is carried on, shall be limewashed or painted at least once in every twelve months.

9. *And be it enacted*, That an abstract of the factory and workshop laws, to be prepared and furnished by the chief factory inspector, shall be affixed in a conspicuous place at the entrance of every factory and workshop.

10. *And be it enacted*, That if the inspector of factories find that the heating, lighting, ventilation or sanitary arrangement of any shop or factory is such as to be injurious to the health of the persons employed therein, or that the means of egress, in case of fire or other disaster, is not sufficient, or that the belting, shafting, gearing, elevators, drums and machinery in shops and factories are located so as to be dangerous to employes and not sufficiently guarded, or that the vats, pans or structures filled with molten metal or hot liquid are not surrounded with proper safeguards for preventing accident or injury to those employed at or near them, he shall notify the proprietor of such factory or workshop to make the alterations or additions necessary within thirty days; and if such alterations or additions are not made within thirty days from the date of such notice, or within such time as said alterations can be made with proper diligence upon the part of said proprietors, said proprietors or agents shall be deemed guilty of violating the provisions of this act; it shall then be the duty of the inspectors to examine the matter in dispute, and if adverse to the appellant he shall carry out the alterations or additions directed by said inspectors within thirty days as aforesaid and under the like penalty.

11. *And be it enacted*, That section fifteen of the act to which this is a supplement be amended to read as follows: 11. *And be it enacted*, That any person or corporation, being the owner, lessee or occupant of any manufacturing establishment, factory, mine, workshop or store, or owning or controlling the use of any building or room, shall, for the violation of any provision of this act or of the act to which this is a supplement, be liable to a penalty of fifty dollars for each offense, to be recovered in an action of debt in any district court in any city or before any justice of the peace having due jurisdiction, and that any employee who shall be guilty of any violation of the provisions of this act shall be liable in a like action to a penalty of not more than fifty dollars, as the court shall fix; that such action shall be prosecuted in the name of the inspector of factories, the trial shall proceed as other actions upon contract, and the first process shall be a summons, returnable in not less than five days or more than ten days after issue, and it shall not be necessary to endorse the same as in *qui tam* actions; the finding of the court shall be that the defendant has or has not, as the case may be, incurred the penalty claimed in the demand of the plaintiff, and judgment shall be given accordingly; in case an execution shall issue and be returned unsatisfied, the court, on application, after notice to the defendant, may award an execution to take the body of the defendant, and in case such a defendant is committed under such an execution he shall not be discharged under the insolvent laws of the state, but shall only be discharged by the court making the order for the body execution, or one of the justices of the supreme court, when such court or justice shall be satisfied that further confinement will not accomplish the payment of the judgment and costs.

12. *And be it enacted*, That all acts or parts of acts inconsistent with the provisions of this act be and the same are hereby repealed.

OHIO.

TO APPORTION THE STATE OF OHIO INTO INSPECTION DISTRICTS AND FOR OTHER PURPOSES.

SECTION 2. The governor shall appoint one chief inspector, by and with the advice and consent of the senate, who, with the approval of the governor, shall appoint three district inspectors. The chief inspector and district inspectors shall be competent and practical mechanics. The chief inspector shall hold his office for a term of four years, and shall have his office in the state house, where shall be kept the records of his office, and the district inspectors shall hold their office for the term of three years from the first day of May after their respective appointments, and until their successors are appointed and qualified; the first appointment hereunder shall be made within thirty days after the passage of this act; in case of the resignation, removal or death of the chief inspector, the vacancy shall be filled in the manner above provided for the original appointments for the unexpired term only of the position so made vacant.

SEC. 3. The chief inspector and district inspectors shall give their whole time and attention to the duties of their offices respectively; it shall be their duty to visit all shops and factories in their respective districts as often as possible, to see that all the provisions and requirements of this act are strictly observed and carried out; they shall carefully inspect the sanitary condition of the same [and it shall be their duty], to ex-

amine the system of sewerage in connection with said shops and factories, the situations and conditions of water-closets or urinals in and about such shops and factories, and also the system of heating, lighting and ventilating all rooms in such shops and factories where persons are employed at daily labor; also as to the means of exit from all such places in case of fire or other disaster, and also all belting, shafting, gearing, elevators, drums and machinery of every kind and description in and about such shops and factories, and see that the same are not located so as to be dangerous to employes when engaged in their ordinary duties, and that the same, so far as practicable, are securely guarded, and that every vat, pan or structure filled with molten metal or hot liquid shall be surrounded with proper safeguards for preventing accident or injury to those employed at or near them; and that all such are in a proper sanitary condition, and are adequately provided with the means of escape in case of fire or other disaster.

SEC. 2573b. The said inspectors shall have entry into all such shops or factories at all reasonable times, and it shall be unlawful for the owner, proprietors, agents or servants in such factories or shops to prevent, at all reasonable hours, their entry into such shops or factories for the purpose of such inspections.

SEC. 2573c. That said inspectors, if they find upon such inspection that the heating, lighting, ventilation or sanitary arrangement of any such shop or factory is such as to be injurious to the health of persons employed or residing therein, or that the means of egress in case of fire or other disaster is not sufficient, or that the belting, shafting, gearing, elevators, drums and machinery in such shops and factories are located so as to be dangerous to employes, and not sufficiently guarded, or that the vats, pans or structures filled with molten metal or hot liquid are not surrounded with proper safeguards for preventing accident or injury to those employed at or near them, shall notify the owners, proprietors or agents of such shops or factories to make the alterations or additions necessary within thirty (30) days; and if such alterations or additions are not made within thirty (30) days from the date of such notice, or within such time as said alterations can be made with proper diligence upon the part of such proprietors or owners, said proprietors, owner or agent so notified shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not more than two hundred (200) and not less than ten (10) dollars, which fine shall be paid into the treasury of the county in which conviction is had.

SEC. 4. The district inspectors shall make a record of all examinations of shops and factories in their respective districts, showing the date when made, the conditions in which such shops and factories are found, and what changes were ordered, the number of shops and factories in their respective districts, the number of men, women and children employed in each shop or factory, together with all such other facts and information of public interest concerning the condition of such shops and factories as they may deem useful and proper, which record shall be filed in the office of the chief inspector every week, to be by him recorded, and so much thereof as may be of public interest to be included in his annual report.

RELATING TO THE EMPLOYMENT OF MINORS IN WORKSHOPS AND FACTORIES.

SEC. 6986. That no minor under the age of twelve years shall be employed in any factory, workshop or establishment wherein the manufacture of any goods of any kind is carried on.

SEC. 6986aa. No minor under the age of eighteen years shall be employed in any of the places named for a longer period than ten hours a day, and in no case shall the hours of labor exceed sixty in one week; and every employer shall post in a conspicuous place in every room where such persons are employed a printed notice, stating the number of hours required of them in each day of the week; the form of such printed notice shall be furnished by the chief inspector of workshops and factories, and shall be approved by the attorney-general; and it shall also be the duty of every employer of minors to keep a record, which shall be open to the inspection of the chief inspector of workshops and factories and his assistants, giving the name of each minor employed, his or her name, date and place of birth, and present residence of parents or guardians.

SEC. 6986bb. Any person or corporation who shall employ any person contrary to the provisions of this act, or who shall violate any of the provisions of this act, shall, upon conviction thereof, be fined in any sum not less than fifty nor more than one hundred dollars, or imprisoned not less than thirty nor more than ninety days.

SEC. 6986c. It shall be the duty of the inspector of shops and factories to prosecute all violations of this act, when the same shall come to his knowledge, in any court of competent jurisdiction.

FOR THE PRESERVATION OF THE HEALTH OF FEMALE EMPLOYEES.

SECTION 1. *Be it enacted by the General Assembly of the State of Ohio*, That every person or corporation employing female employes in any manufacturing, mechanical or mercantile establishment in this state shall provide suitable seats for the use of the female employes so employed, and shall permit the use of such by them when they are not necessarily engaged in the active duties for which they are employed.

SEC. 2. Any person or corporation violating any of the provisions of this act shall be punished by a fine of not less than ten dollars nor more than seventy-five dollars for each offense.

TO PROVIDE FOR THE COLLECTION OF INFORMATION RELATIVE TO ACCIDENTS OCCURRING IN THE WORKSHOPS AND FACTORIES OF THE STATE.

SECTION 1. *Be it enacted by the General Assembly of the State of Ohio*, That it shall be the duty of all manufacturers of the state, to forward by mail to the chief inspector of workshops and factories, at Columbus, a report of each and every serious accident resulting in bodily injury to any person which may occur in their establishment, giving particulars of the same as fully as can be ascertained, upon blanks which shall be furnished by the chief inspector of workshops and factories. If death shall result to any employe from any such accident, said report shall contain the age, name, sex and employment of the deceased, whether married, the number of persons, if any, deprived of support in consequence thereof, and the cause of the accident, if known. If the accident has caused bodily injury of such nature as to prevent the person injured from returning to his or her employment within six or more days after the occurrence of the accident, then the report shall contain the age, name, sex and the employment of the disabled, the nature and extent of the injury received, how caused, if known, how long continually disabled, loss of time and wages therefrom, and if possible the expense thereby incurred in full.

PENALTY FOR FAILURE TO SO REPORT.

SECTION 2. That any manufacturer who shall fail to comply with the requirements of this act in each case of death by accident within seven days thereafter, and in each case of injury by accident within thirty days thereafter, shall be fined in any sum not less than ten dollars nor more than fifty dollars.

THE TERM "MANUFACTURER" DEFINED.

The term "manufacturer," as applied in section one and section two of this act, shall be held to mean any person who, as owner, manager, lessee, assignee, receiver, contractor, or who as agent of any incorporated company, makes or causes to be made, any kinds of goods or merchandise, or who owns, controls, or operates any street railway, laundrying establishment, or is engaged in the construction of buildings, bridges or structures, or in loading or unloading vessels, or cars, or moving heavy materials, or operating dangerous machinery, or in the manufacture or use of explosives.

SECTION 3. It shall be the duty of the chief inspector of workshops and factories to supply all blanks necessary to make said reports, as required in this act, and to prosecute all violations of this act when the same shall come to his knowledge; provided, that the furnishing of said blanks shall be a condition precedent to prosecution in any case.

NEW YORK.

TO REGULATE THE EMPLOYMENT OF WOMEN AND CHILDREN.

SECTION 1. No minor under the age of eighteen years, nor any woman under twenty-one years, shall be employed at labor in any manufacturing establishment in this state for a longer period than sixty hours in any one week, unless for the purpose of making necessary repairs.

SEC. 2. No child under thirteen years of age shall be employed in any manufacturing establishment within this state. It shall be the duty of every person so employing children to keep a register in which shall be recorded the name, birthplace, age, and place of residence of every person so employed by him under the age of sixteen years.

And it shall be unlawful for any manufacturing establishment to hire or employ any child under the age of sixteen years without there is first provided and placed on file an affidavit made by the parent or guardian, stating the age, date, and place of birth of said child; if said child have no parent or guardian, then such affidavit shall be made by the child, which affidavit shall be kept on file by the employer, and which said register and affidavit shall be produced for inspection on demand made by the inspector, assistant inspector, or any of the deputies appointed under this act.

SEC. 3. Every person, firm, or corporation employing women under twenty-one years, or minors under eighteen years of age, in any manufacturing establishment, shall post and keep posted in a conspicuous place in every room where such help is employed, a printed notice stating the number of hours per day for each day of the week required of such persons, and in every room where children under sixteen years of age are employed, a list of their names with their age.

SEC. 4. Any person who knowingly violates or omits to comply with any of the foregoing provisions of this act, or who knowingly employs or suffers or permits any child to be employed in violation of its provisions, shall, on conviction, be punished by a fine of not less than fifty nor more than one hundred dollars, and in default of payment of such fine, by imprisonment for not less than thirty nor more than ninety days.

SEC. 5. No person or corporation employing less than five persons or children, excepting in any of the cities of this state, shall be deemed a manufacturing establishment within the meaning of this act.

SEC. 6. The governor shall, immediately after the passage of this act, appoint, with the advice and consent of the senate, a factory inspector at a salary of two thousand dollars per year, and one assistant at a salary of fifteen hundred dollars per year, whose term of office shall be three years. The said inspector and assistant shall be empowered to visit and inspect, at all reasonable hours, and as often as practicable, the factories, workshops, and other establishments in the state, where the manufacture of goods is carried on, and to report to the bureau of labor statistics of this state on or before the thirtieth day of November of each year. It shall also be the duties of said inspector to enforce the provisions of this act, and to prosecute all violations of the same before any magistrate or any court of competent jurisdiction in the state.

SEC. 7. All necessary expenses incurred by said inspectors in the discharge of their duty shall be paid from the funds of the state, upon the presentation of proper vouchers for the same, provided that not more than twenty-five hundred dollars shall be expended by them therefor in any one year.

SEC. 8. It shall be the duty of the owner, agent, or lessee of any manufacturing establishment where hoisting shafts or well-holes are used, to cause the same to be properly and substantially inclosed or secured, if, in the opinion of the inspector, it is necessary to protect the life or limbs of those employed in such establishments. It shall also be the duty of the owners, agent, or lessee to provide or cause to be provided such proper trap or automatic doors, so fastened in or at all elevator ways as to form a substantial surface when closed, and so constructed as to open and close by action of the elevator in its passage, either ascending or descending.

SEC. 9. Proper and substantial hand-rails shall be provided on all stairways in manufacturing establishments, and where, in the opinion of the inspector, it is necessary, the steps of such stairs in all such establishments shall be substantially covered with rubber, securely fastened thereon, for the better safety of persons employed in said establishments. The stairs shall be properly screened at the sides and bottom, and all doors leading in or to such factory shall be so constructed as to open outwardly where practicable, and shall be neither locked, bolted nor fastened during working hours.

SEC. 10. Fire-escapes shall be provided on the outside of all factories three or more stories in height, connecting with each floor above the first, well fastened and secured, and of sufficient strength. Stationary stairs or ladders shall be provided on the inside, from the upper story to the roof, as a means of escape in case of fire.

SEC. 11. It shall also be the duty of the owner of such factory, or his agent, superintendent, or other person in charge of the same, to furnish and supply, or cause to be furnished and supplied, in the discretion of the inspector, where machinery is in use, automatic shifters, or other mechanical contrivances, for the purpose of throwing on or off belts on pulleys; and no female under the age of twenty-one years, and no male under eighteen years of age, shall be allowed to clean machinery while in motion. All gearing and belting shall be provided with proper safe-guards.

SEC. 12. It shall be the duty of the agent, superintendent, or other person having charge of a factory or workshop, or of any floor or part thereof, to report in writing to the factory inspector all accidents or injury done to any person employed in such factory,

within forty-eight hours of the time of the accident, stating as fully as possible the extent and cause of such injury, and the place where the injured person has been sent.

SEC. 13. A suitable and proper wash-room and water-closet shall be provided for females where employed, and the water-closets used by females shall be separate and apart from those used by males, and shall be properly screened and ventilated, and at all times kept in a clean condition.

SEC. 14. Not less than forty-five minutes shall be allowed for the noon-day meal in any manufacturing establishment in this state. The factory inspector, his assistant or any of his deputies, shall have power to issue written permits in special cases, allowing a shorter meal-time at noon, and such permit must be conspicuously posted in the main entrance of the establishment, and such permit may be revoked at any time the inspector deems necessary, and shall only be given where good cause can be shown.

SEC. 15. The factory inspector, now or hereafter appointed under and by virtue of the provisions of chapter four hundred and nine of the laws of eighteen hundred and eighty-six, is hereby authorized to appoint such number of persons as in his judgment may be necessary, not exceeding eight, who shall be known as deputy factory inspectors, either or any one of whom may be appointed to act as clerk in the main office, and whose duties it shall be to enforce the provisions of this act and of chapter four hundred and nine of the laws of eighteen hundred and eighty-six. The powers of said deputies shall be the same as the powers of the factory inspectors, subject to the supervision and direction of the factory inspector.

SEC. 16. The district attorney of any county of this state is hereby authorized, upon the request of the factory inspector, or either of his deputies, or of any other person of full age, to commence and prosecute to termination before any recorder, police justice, or court of record, in the name of the people of the state, actions or proceedings against any person or persons reported to him to have violated the provisions of this act.

SEC. 17. The traveling expenses of each of said deputies shall be approved by the inspector and audited by the comptroller of the state, before payment, and said deputy inspectors shall have an annual salary of ten hundred dollars, to be paid monthly by the treasurer of the state out of any moneys not otherwise appropriated.

SEC. 18. Said factory inspector shall have power to divide the state into districts and assign one of said deputies to each district, and may transfer any of the deputies to other districts in case the best interests of the state require it. The inspector shall have the power of removing any of the deputy inspectors at any time.

SEC. 19. The factory inspector shall receive an annual salary of two thousand dollars, and the assistant factory inspector shall receive an annual salary of fifteen hundred dollars, and they shall make a report to the legislature on or before the tenth day of January of each year; and an office shall be furnished by the capitol commissioner, in the new capitol, as soon as practicable, which shall be set apart for the use of the factory inspector. The factory inspector, his assistant and deputies shall have the same power to administer oaths as is now given to notaries public, in cases where persons desire to verify documents connected with the proper enforcement of this act.

SEC. 20. Any person who violates or omits to comply with any of the foregoing provisions of this act shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than twenty nor more than one hundred dollars, or by imprisonment for not less than thirty nor more than ninety days, or by both such fine and imprisonment.

SEC. 21. A copy of this act shall be posted in each work-room of every manufacturing or mercantile house in this state where persons are employed who are affected by the provisions of this act.

APPRENTICES AND EMPLOYERS.

SECTION 1. On and after the passage of this act, it shall not be lawful for any person or persons in this state to employ or take as an apprentice any minor person to learn the art or mystery of any trade or craft without first having obtained the consent of such person's legal guardian or guardians; nor shall any minor person be taken as an apprentice aforesaid unless an agreement or indenture be drawn up in writing, in accordance with the provisions of this act, and duly executed under seal by the person or persons employing said apprentice, and also by the parents or parent, if any be living, or by the guardian or guardians of said apprentice, and likewise by said minor persons so becoming an apprentice.

SEC. 2. Said agreement or indenture, in order to make the law valid, shall contain the following covenants and provisions:

1. That said minor person shall be bound to serve his employer or employers for a term of not less than three nor more than five years.

2. That said minor person so indentured shall not leave his said employer or employers during the term for which he shall be indentured, and if any said apprentice so indentured as aforesaid shall leave his said employer or employers, except as hereinafter provided, the said employer or employers may compel the return of the said apprentice under the penalties of this act.

3. That said employer or employers shall covenant and agree in said indenture to provide, at all times during the continuance of the same, suitable and proper board, lodging and medical attendance for said apprentice, and said employer or employers shall also further covenant and agree to teach or cause to be carefully and skillfully taught to his or their said apprentice every branch of his or their business to which said apprentice may be indentured, and said employer or employers shall be further bound, at the expiration of said apprenticeship, to give to said apprentice a certificate in writing stating that said apprentice has served a full term of apprenticeship of not less than three nor more than five years at such trade or craft as may be specified in said indenture.

SEC. 3. Any person or persons taking an apprentice without complying with the provisions of this act shall be deemed guilty of a misdemeanor, and on conviction thereof before any magistrate or court having jurisdiction, held in the county in which the business of said employer or employers may be conducted, shall be subject to a fine of not less than five hundred dollars, the fine to be paid to the treasurer of the said county, for the use and benefit of said county. It shall be the duty of the factory inspector and the deputy factory inspectors to see to it that the duties and obligations of employers to their apprentices are observed and enforced, to enforce this act, and to prosecute such employers for a failure to perform such duties and obligations, or any violation of this act.

SEC. 4. Any and all indentures made under and in pursuance of the provisions of this act shall not be canceled or annulled before the expiration of the term of said indentures, except in case of death; or by the order of or judgment of the county or supreme court of this state for good cause, and any apprentice so indentured who shall leave his employer or employers without his or their consent, or without sufficient cause, and shall refuse to return, may be arrested upon the complaint of said employer or employers, and taken before any magistrate having jurisdiction of misdemeanors, who may cancel said indentures, and on conviction may commit said apprentice to the house of correction, house of refuge or county jail, in and for said county, for such length of time as such magistrate may deem just, or until said apprentice shall have attained the age of twenty-one years, and in case said apprentice, so indentured, shall willfully neglect or refuse to perform his portion of the contract, as specified in said indenture, then said indenture may be canceled in the manner aforesaid, and said apprentice so violating said indentures shall forfeit all back pay and all claims against said employer or employers, and said indentures shall be canceled.

SEC. 5. Should any employer or employers neglect or refuse to teach, or cause to be taught to said apprentice the art or mystery of the trade or craft to which said apprentice has been indentured, or fail at any time to provide suitable and proper board, lodging and medical attendance, said apprentice, individually, or his parent or parents, guardian or guardians, may bring an action against said employer or employers, to recover damages sustained by reason of said neglect or refusal; and if proved, to the satisfaction of the court, said court shall direct said indentures to be canceled, and may impose a fine on said employer or employers, not exceeding \$1,000, and not less than \$100, and said fine shall be collected and paid over to said apprentice or his parent or guardian, for his sole use and benefit.

SEC. 6. Any indenture made and executed, wherein parts conflict with, or are not in accordance with the provisions of this act, shall be invalid, and without any binding effect.

SEC. 7. All acts or parts of acts inconsistent herewith are hereby repealed.

WISCONSIN.

POWERS AND DUTIES OF THE BUREAU OF LABOR AND INDUSTRIAL STATISTICS.

SECTION 4. The duties of the said commissioner of the Bureau of Labor and Industrial Statistics shall be to collect, collate and publish statistics and facts relative to the manufactures, industrial classes and material resources of the state; and especially

to examine into the relations between labor and capital, the means of escape from fire, and protection of life and health in factories and workshops, the employment of illegal child-labor, the exaction of unlawful hours of labor from women and children, the educational, sanitary, moral and financial condition of laborers and artisans, the cost of food, fuel, clothing and building material, the causes of strikes and lockouts, as well as kindred subjects and matters pertaining to the welfare of industrial interests and classes.

SEC. 5. The commissioner, his deputy, or the factory inspector shall have power to enter any factory, or workshop in which labor is employed, for the purpose of gathering facts and statistics, or of examining the means of escape from fire, and the provisions made for the health and safety of operatives in such factory or workshop; and in case the officer of the bureau shall discover any violations of or neglect to comply with the laws in respect to child labor, hours of labor for women or children, fire-escapes, and similar enactments now or hereafter to be made, he shall notify the owner or occupant of such factory or workshop, in writing, of the offense or neglect, and if such offense or neglect is not corrected or remedied within thirty days after the service of the notice aforesaid, he shall lodge formal complaint with the district attorney of the county in which the offense is committed or the neglect occur, whereupon that officer shall proceed at once against the offender according to law.

SEC. 6. The factory inspector or any officer of the bureau may examine hotels and lodging or boarding houses, for the purpose of discovering whether they are properly equipped with lawful fire-escapes; and he may post in any hotel, lodging or boarding house so examined, the laws upon this matter, together with his official statement as to whether the said laws are fully complied with by said hotel, lodging or boarding house. And any hotel, lodging or boarding house keeper, or other person, who shall mutilate, destroy or remove from any building or buildings, the said laws or statement so posted, shall be fined fifty dollars for each and every offense, upon complaint of any officer of the bureau, or any citizen. Whenever any hotel, lodging or boarding house that has been posted as not complying with the terms of the laws in respect to fire-escapes, shall be properly provided and equipped with lawful fire-escapes, and the bureau shall be notified thereof, the commissioner shall at once order a new statement, setting forth that fact, to be posted in said hotel, lodging or boarding house. And the bureau shall keep a record of all buildings so examined and posted.

SEC. 7. The factory inspector, or any officer of the bureau, may post in any factory or workshop examined by him, the laws now or hereafter to be made in respect of child labor, hours of labor, fire-escapes, or other matters pertaining to the health and safety of artisans; and if the owner, manager or proprietor of such factory or workshop, or his agent, or any person whomsoever, shall remove, destroy or mutilate the laws so posted, he shall, on complaint of any officer of the bureau, or any citizen, be fined fifty dollars for each and every offense.

SEC. 8. The said commissioner shall have power to prescribe blank forms, and transmit them to employers, which shall be filled out clearly and completely, under oath, by the person or persons to whom they are sent, with the facts, statistics and statements asked for, and returned to him within such reasonable time as he may fix. In case any owner or occupant or his agent, shall refuse to admit any officer of the said bureau to his workshop or factory, he shall forfeit the sum of ten dollars for each and every offense, and if he shall, through his agent or otherwise, neglect, fail or refuse to fill out the said blank forms, and verify and return them as required, he shall forfeit the sum of ten dollars for each and every day the said blanks may be so delayed beyond the time fixed by the commissioner for their return. The forfeits named and provided in this act shall be sued for in the name of the state, by the district attorney of the proper county, upon complaint of any officer of said bureau, or any citizen, and shall be paid into the school fund.

PASSENGER AND OTHER ELEVATORS—LIABILITY OF PROPRIETORS—DUTY OF DISTRICT ATTORNEYS.

SECTION 1, Chap. 453, Laws of 1887. The state factory inspector, his assistant, or any officer of the bureau of labor and industrial statistics, may examine elevators used for carrying freight or passengers, or both, and shall condemn those found to be defective or unsafe by written notice given to the proprietor or owner, or the agent of either, or by posting said notice on the elevator walls or cab. And if any elevator so condemned shall be continued in use without repairs, and loss of limb or life result therefrom, the owner or proprietor so keeping it in use shall be held fully responsible, civilly and criminally, for said loss of life or limb.

SEC. 2. The said factory inspector or any officer named in section 1 of this act, shall have power to order bull-wheels, fly-wheels, tumbling rods, elevator wells, stairways,

shafting or dangerous machinery of any kind to be guarded and protected, so as not to hazard the safety of workmen or visitors. Any person refusing to obey his orders in this respect, shall be fined fifty dollars for each and every offense.

SEC. 3. Whenever the state factory inspector, or his assistant, or any officer of the bureau of labor and industrial statistics, shall file complaint with any district attorney that any hotel, factory or public building or any structure whatsoever in his county, is being used without the fire-escapes, watchmen or other means of safety prescribed by law, the said district attorney shall at once proceed against the offender according to law; and shall without further aid or presence of the state factory inspector or the other officers named in this section, secure the necessary witnesses and evidence for the complete information of the jury. And in case he shall refuse to do so, the state factory inspector or any officer named in this act, may file charges against him with the governor, and ask his removal for willful neglect of duty and malfeasance of office.

FIRE-ESCAPES—HOTELS.

SECTION 1727, Revised Statutes. It shall be and is hereby made the duty of hotel or inn-keepers, keeping a hotel or inn of three or more stories in height, to provide and furnish such hotel or inn with one or more good and substantial metallic fire-proof ladders, reaching from the cornice to the top of the lower story, or to the ground, on the outside of such building, and placed in such position as to be easy of access to the occupants of such building in case of fire. So long as the foregoing provision is uncomplied with by him, no hotel or inn-keeper shall receive any charges whatever from any objecting traveler, boarder or guest occupying rooms on or above the third floor of his hotel or inn.

SECTION 1. Every inn or hotel, or other building in this state more than two stories in height, containing apartments above the ground floor, designed for occupation for fifty people or more, shall be provided with not less than two flights of fire-proof stairs outside, said stairways to be located on different sides of said inn, hotel, or other building, in each case connecting the cornice with the top of the first story, of any such inn, hotel, or other building, with a platform, balcony, piazza, or other safe and convenient resting place, on a level with the floor of each story so connected. Such stairways herein named shall in every case be convenient of access from the interior of any such building, commodious in construction, and of sufficient strength and firmness to render the same amply safe and reliable for the purpose of ascent or descent in case of danger from fire.

SEC. 2. The inside walls or casings of every elevator for the conveyance of passengers to and from the upper stories of any such building as is described in the preceding section of this act, shall be constructed of fire-proof material throughout.

SEC. 3. In all inns, hotels or other buildings hereinbefore described, not less than one efficient watchman shall be on service from ten o'clock P. M. until five o'clock A. M. during each and every night that said inn, hotel or other building described is occupied, and every said watchman shall be required to establish the fact of his fidelity on every occasion when on duty, by the most efficient methods in use for that purpose.

SEC. 4. In every inn, hotel or other building hereinbefore described, there shall be posted in every room, in legible print, a brief and accurate statement of all means of safety and escape in case of fire.

SEC. 5. Any owner, landlord or other person in charge of any building hereinbefore described, and coming within the provisions of this act, who shall omit to comply with the provisions of this act, or who shall knowingly permit any violation of the provisions of this act, shall be held guilty of a misdemeanor in permitting the violation of any provisions of this act and for such misdemeanor may be punished by a fine not exceeding one thousand dollars, or by imprisonment not exceeding ninety days, on each conviction thereof.

FIRE-ESCAPES—FACTORIES

SECTION 1. Any person, persons, or body corporate owning, occupying or controlling any factory, workshop or structure three or more stories high, in which several persons are employed at any kind of labor, on or above the third floor or story, shall provide and keep connected with the same, one or more good and substantial metallic or fire-proof ladders, stairs or stairways, ready for use at all times, reaching from the cornice to the ground, on the outside of such building, and placed in such position as to be easy of access to the occupants of such building in case of fire, and sufficient to furnish reasonable means of escape to the persons employed therein, from each and every floor or story. And any such person, persons or corporate body who shall for three months after the passage and

publication of this act fail to provide and keep such means of escape from fire, shall be subject to a fine not exceeding one hundred dollars or to imprisonment in the county jail not exceeding three months, at the discretion of the court.

OUTWARD SWINGING DOORS.

SECTION 1. All churches, public and private school-houses, hotels, factories or other manufacturing establishments, constructed at any time after the passage of this act, shall be so constructed that the doors shall swing outward, or both in and out, as the builders thereof may elect.

DUTIES OF ARCHITECTS AND OTHERS.

SECTION 1. Any architect who shall draw plans for, or superintend the erection of any school-house, church, hall, factory or hotel, without providing in said plans the fire-escapes and outward swinging doors now required by law, shall be guilty of a misdemeanor, and on conviction thereof, shall be fined twenty-five dollars for the first offense, and one hundred dollars for each subsequent offense.

SEC. 2. Any person or persons, body corporate, official or officials, who shall erect or cause to be erected, any building named in this act, without providing the fire-escapes and outward swinging doors, or who shall neglect to provide the same as required by law, shall be guilty of a misdemeanor, and upon conviction thereof, shall be fined one hundred dollars.

BLACK-LISTING EMPLOYEES.

SECTION 1. Any two or more employers who shall agree, combine, and confederate together for the purpose of interfering with or preventing any person or persons seeking employment from obtaining such employment either by threats, promises, or by circulating or causing the circulation of the so-called black-list, or by any means whatsoever, or for the purpose of procuring or causing the discharge of any employe or employes by any means whatsoever, shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by imprisonment in the county jail for a period of not more than one month or by a fine not less than fifty dollars, or by both.

HOURS OF LABOR.

SECTION 1729. Revised Statutes. In all engagements to labor in any manufacturing or mechanical business, where there is no express contract to the contrary, a day's work shall consist of eight hours, and all engagements or contracts for labor in such cases shall be so construed; but this shall not apply to any contract to labor by the week, month or year.

SEC. 1728. In all manufactories, workshops and other places used for mechanical or manufacturing purposes, the time of labor of children under the age of eighteen years and of women employed therein, shall not exceed eight hours in one day; and any employer, stockholder, director, officer, overseer, clerk or foreman who shall compel any woman or any such child to labor exceeding eight hours in any one day, or who shall permit any child under fourteen years of age to labor more than ten hours in any one day in any such place, if he shall have control over such child sufficient to prevent it, or who shall employ at manual labor any child under twelve years of age in any factory or workshop where more than three persons are employed, or who shall employ any child of twelve and under fourteen years of age in any such factory or workshop for more than seven months in any one year, shall be punished by a fine not less than five nor more than fifty dollars for each such offense.

INTERFERING WITH LABORERS OR MACHINERY.

SECTION 1. Any person who by threats, intimidation, force or coercion of any kind, shall hinder or prevent any other person from engaging in or continuing in any lawful work or employment, either for himself or as wageworker, or who shall attempt to so hinder or prevent, shall be punished by a fine not exceeding one hundred dollars, or by imprisonment in the county jail not more than six months, or by both fine and imprisonment, in the discretion of the court.

SEC. 2. If any person who shall individually or in association with one or more others, willfully break, injure or remove any part or parts of any railway car or locomotive, or any other portable vehicle or traction engine, or any part or parts of any stationary engine, machine, implement or machinery, for the purpose of destroying such locomotive, engine, car, vehicle, implement or machinery, or of preventing the useful operation thereof, or who shall in any other way wilfully or maliciously interfere with or prevent the running or operation of any locomotive, engine or machinery, shall be punished by fine not exceeding one thousand dollars or by imprisonment in the county jail or the state prison not exceeding two years, or by both fine and imprisonment, in the discretion of the court.

HEALTH AND SAFETY OF EMPLOYEES.

SECTION 1. No person, persons or corporation shall employ and put to work in any factory, workshop or other place of employment, or in any room, or other part of such factory, workshop, or other place of employment, more persons than the laws of health will warrant, as shall be determined by the board of health.

SEC. 2. Every stationary vat, pan or other structure with molten metal or hot liquids shall be surrounded with proper safeguards for preventing accidents or injury to those employed at or near them. All belting, shafting, gearing, hoists, fly-wheels, elevators and drums of manufacturing establishments so located as to be dangerous to employees when engaged in their ordinary duties shall be securely guarded or fenced so as to be safe to persons employed in any such place of employment.

SEC. 3. Any person, company or corporation who shall refuse or fail to comply with the provisions of this act, shall forfeit not to exceed twenty-five dollars for each offense, and every day's failure after the first conviction shall constitute a separate offense, after due notice by the state factory inspector.

CONNECTICUT.

CHILD-LABOR.

SECTION 1. No child under thirteen years of age shall be employed in any mechanical, mercantile, or manufacturing establishment.

SEC. 2. Any person acting for himself, or as agent in any way whatever, of any mechanical, mercantile, or manufacturing establishment, who shall employ, or authorize or permit to be employed in such establishment, any child in violation of the preceding section, shall be fined not more than sixty dollars, and every week of such illegal employment shall be a distinct offense; provided, that no person shall be punished under this act for the employment of any child when, at the time of such employment, the employer shall demand and thereafter during such employment keep on file the certificate of any town clerk, or of the teacher of the school where such child last attended, stating that such child is more than thirteen years of age, or a like certificate of the parent or guardian of such child in such cases only where there is no record of the child's age in the office of the town clerk, and such child has not attended school in this state. Any parent or guardian who shall sign any certificate that his child or ward is more than thirteen years of age, when in fact such child or ward is under thirteen years of age, shall be fined not more than sixty dollars.

SEC. 3. It shall be the duty of the state board of education and the school visitors, boards of education, and town committees of towns to enforce this act; and for that purpose the state board of education may appoint agents, under its supervision and control, for terms of not more than one year, who shall be paid not to exceed five dollars per day for time actually employed and necessary expenses, and whose accounts shall be approved by said board and audited by the comptroller.

CONCERNING THE INSPECTION OF FACTORIES.

SECTION 1. *Be it enacted by the Senate and House of Representatives in General Assembly, convened.* The governor shall appoint an inspector of factories who shall hold his office from the first day of July, 1887, till the first day of July, 1889, and until his successor is appointed and qualified. The governor shall, with the consent of the senate, within sixty days after the organization of the general assembly in January, 1889, and every

two years thereafter, appoint an inspector of factories, who shall hold his office from the first day of the succeeding July for a term of two years, and until his successor is appointed and qualified. In case of vacancy in the office of inspector through death, resignation, inability or removal, the governor shall fill the same until filled in the manner above provided for the appointment of inspector; and the governor may remove the inspector for cause.

SEC. 2. The inspector of factories shall, as often as practicable, carefully examine all buildings and places where machinery shall be used, and shall have authority to enter such buildings and places at all proper times for the purpose of such inspection, and shall receive for his services the sum of fifteen hundred dollars per annum, payable monthly, and necessary expenses. He shall, on or before the first day of December in each year, make a report to the governor of the condition, as respects safety to life and health, of the factories, buildings, and places visited by him, and such report shall be printed for the use of the general assembly at each of its regular sessions.

SEC. 3. All factories and buildings where machinery shall be used shall be well ventilated, and kept as clean as the nature of the business will permit. The belting, shafting, gearing, machinery, and drums of all factories and buildings where machinery shall be used, when so placed as, in the opinion of the inspector, to be dangerous to persons employed therein while engaged in their ordinary duties, shall, as far as practicable, be securely guarded. No machinery other than steam engines in a factory shall be cleaned while running, after notice forbidding the same is given by the inspector to the owners or operators of the factory.

SEC. 4. The inspector may order the opening of all hoistways, hatchways, elevator-wells, and well-holes upon every floor of any factory or other building where machinery shall be used to be protected by good trap-doors, self-closing hatches, and safety-catches, or other safe guards such as will insure the safety of the employees in such factory or other building where machinery shall be used, and all due diligence shall be used to keep such trap-doors closed at all times, except when in actual use by an occupant of the building having use and control of the same.

SEC. 5. Every person or corporation managing or operating any factory, or owning or controlling the use of any other building where more than five persons shall be employed at labor, shall provide suitable water-closet accommodations for the use of the persons employed, and shall keep the same in good sanitary condition.

SEC. 6. It shall be the duty of the inspector to enforce the provisions of this act by giving proper orders or notices to the persons or corporations owning, operating, or managing the factories or buildings inspected by him, and also to make complaint to the state's attorneys in the several counties, respectively, of all violations of this act.

SEC. 7. Any person, firm or corporation, being the owner, lessee, or occupant of any factory or building included within the provisions of this act, or owning or controlling the use of any room in such building, shall, for a violation of any provision of section three, four, or five hereof, forfeit to the use of the state not less than fifty nor more than five hundred dollars, and shall also be liable to any employe for all damages suffered by him by reason of such violation. It shall be the duty of the state's attorneys in the several counties to collect forfeitures under this act, but no suit shall be brought for any such violation, either in behalf of any person or the state, until four weeks after notice has been given by the inspector to such person, firm, or corporation of any changes necessary to be made to comply with the provisions of said sections, and not then if, in the meantime, such changes have been made in accordance with such notification. Nothing herein shall be construed as limiting in any way the right of a person injured to bring an action to recover damages for the same, as though this act had not been passed.

SEC. 8. The orders and notices given by the inspector under this act shall be written or printed, and signed by him officially, and may be served by himself or any proper officer or indifferent person, by leaving an attested copy thereof with or at the usual place of abode of the person upon whom service is to be made; and the notice, properly indorsed with the doings of the person or officer serving the same, shall be returned to the office of the town clerk of the town in which is located the factory, building, or business to which such notice appertains, where it shall be kept on file. Such notice, and copies thereof, duly certified by the town clerk, shall be *prima facie* evidence that notice was given as therein appears. Notice to one member of a firm shall be notice to every member thereof, and notice to the president, secretary or treasurer of a corporation shall be notice to such corporation. The fees for serving such orders and notices, unless served by the inspector, shall be the same as for the service of process in civil actions, and shall be included in the necessary expenses of the inspector, and paid by the state.

SEC. 9. It shall be the duty of the comptroller to provide suitable rooms in the

capitol at Hartford for the use of the inspector, and to furnish him blank forms for the purpose of giving him notices and orders required by this act, and for annual reports to be made to the governor. The inspector shall keep, in books provided by the comptroller for that purpose, copies of all notices and orders given by him, and a record of inspections and examinations made, and upon the expiration of his term of office shall file his books of record with the secretary of state.

SEC. 10. The inspector may, from time to time, employ special agents to assist him in his inspections and examinations, who shall receive compensation for the time actually employed in such service only. The total amount expended under section ten of this act shall not exceed in any one year the sum of fifteen hundred dollars, which shall be paid by the state upon proper vouchers by the special agents, which shall be signed by the inspector.

MAINE.

TO REGULATE THE HOURS OF LABOR AND THE EMPLOYMENT OF WOMEN AND CHILDREN.

SECTION 1. No female minor under eighteen years of age, no male minor under sixteen years of age, and no woman shall be employed in laboring in any manufacturing or mechanical establishment in this state more than ten hours in any one day, except when it is necessary to make repairs to prevent the interruption of the ordinary running of the machinery, or when a different apportionment of the hours of labor if made for the sole purpose of making a shorter day's work for one day of the week; and in no case shall the hours of labor exceed sixty in one week; and no male person sixteen years and over shall be so employed as above more than ten hours a day during minority, unless he voluntarily contracts to do so with the consent of his parents, or one of them, if any, or guardian, and in such case he shall receive extra compensation for his services; provided, however, any female of eighteen years of age or over may lawfully contract for such labor for any number of hours in excess of ten hours per day, not exceeding six hours in any one week or sixty hours in any one year, receiving additional compensation therefor; but during her minority the consent of her parents, or one of them, or guardian, shall first be obtained.

SEC. 2. Every employer shall post in a conspicuous place in every room where such persons are employed a notice, printed in plain, large type, stating the number of hours' work required of them on each day of the week, the exact time for commencing work in the morning, stopping at noon for dinner, commencing after dinner, stopping at night; the form of such printed notice shall be furnished by the deputy commissioner of labor hereafter named, and shall be approved by the attorney-general; and the employment of any such person for a longer time in any day than that so stated shall be deemed a violation of section one, unless it appears that such employment is to make up for time lost on some previous day of the same week, in consequence of stopping of machinery upon which such person was employed or dependent for employment.

SEC. 3. Whoever, either for himself, or as superintendent, overseer, or agent of another, employs or has in his employment any person in violation of the provisions of section one, and every parent or guardian who permits any minor to be so employed, shall be punished by a fine of not less than twenty-five dollars nor more than fifty dollars for each offense. A certificate of the age of a minor made by him, and by his parent or guardian at the time of his employment shall be conclusive evidence of his age in behalf of the hirer upon any prosecution for a violation of the provisions of section one. Whoever falsely makes and utters such a certificate with an intention to evade the provisions of this act shall be subject to a fine of one hundred dollars.

SEC. 4. It shall be lawful for any person, firm or corporation engaged in any manufacturing or mechanical business to contract with adult or minor employees to give one week's notice of intention on such employee's part to quit such employment, under a penalty of forfeiture of one week's wages. In such case the employer shall be required to give a like notice of intention to discharge the employee; and on failure shall pay to such employee a sum equal to one week's wages. No such forfeiture shall be enforced when the leaving or discharge of the employee is for a reasonable cause; provided, however, the enforcement of the penalty aforesaid shall not prevent either party from recovering damages for a breach of the contract of hire.

SEC. 5. No child under twelve years of age shall be employed in any manufacturing or mechanical establishment in this state. Whoever, either for himself, or as super-

intendent, overseer, or agent of another, employs or has in his employment any child in violation of the provisions of this section, and every parent or guardian who permits any child to be so employed, shall be punished by a fine of not less than twenty-five nor more than fifty dollars for each offense.

SEC. 6. No child under fifteen years of age shall be employed in any manufacturing or mechanical establishment of this state, except during vacations of the public schools in the city or town in which he resides, unless during the year next preceding the time of such employment he has for at least sixteen weeks attended some public or private school, eight weeks of which shall be continuous; nor shall such employment continue unless such child in each and every year attends some public or private school for at least sixteen weeks, and no child shall be so employed who does not present a certificate made under or by the direction of the school committee, superintendent of the public schools, or the teacher of a private school, that such child has so attended school; and it shall be the duty of such committee, superintendent, or teacher to furnish such a certificate in accordance with the fact, upon request and without charge; provided, that this section shall not take effect until January one, eighteen hundred and eighty-eight.

SEC. 7. Any parent or guardian who procures a child to be employed contrary to section six, and any corporation, owner, superintendent, or agent of the owner of such establishment violating the provisions of said section, shall forfeit the sum of one hundred dollars, one-half to the use of the county and one-half to the use of the city or town where the offense is committed. Money so recovered to the use of the city or town shall be added to its school money. It shall be the duties of the school committees and superintendent of public schools to inquire into violations of said section, and report the same to the county attorney, who shall prosecute therefor.

SEC. 8. Every owner, superintendent, or overseer of any such manufacturing or mechanical establishment shall require and keep on file a certificate of the age and place of birth of every child under sixteen years of age employed therein, so long as such child is so employed, which certificate shall also state in the case of a child under fifteen years of age the amount of his school attendance during the year next preceding such employment. Said certificate shall be signed by a member of the school committee of the place where such attendance has been had, or by some one authorized by such committee; and the form of said certificate shall be furnished by the state superintendent of schools, and shall be approved by the attorney-general. The deputy commissioner of labor hereinafter named, or either of his assistants may demand the names of children under sixteen years employed in such establishment, in the several cities and towns of the state, and may require that the certificates of age and school attendance prescribed in this section shall be produced for his inspection, and a failure to produce the same shall be *prima facie* evidence that the employment of such child is illegal.

SEC. 9. The governor, by and with the advice and consent of council, shall appoint a deputy commissioner of labor, at a salary of one thousand dollars a year, who shall hold office for two years, or until his successor is appointed, unless sooner removed. It shall be the duty of the deputy commissioner of labor to inquire into any violations of this act, and also to assist in the collection of statistics and other information which may be required for the use of the bureau of industrial and labor statistics; and said deputy commissioner shall, in addition to his salary provided by law, be allowed his reasonable expenses. Whenever the governor of this state shall be satisfied the deputy commissioner of labor cannot perform all the duties of his said office required by this section, in person, he shall, with the advice and consent of the council, appoint a sufficient number of assistant deputies to assist him in so doing. Said assistants shall hold their office for the term of two years, and act under the direction of said deputy commissioner of labor, and shall receive the sum of two dollars per day and reasonable expenses while actually engaged in duty. Said assistants may, at any time, be removed for cause by the governor. All bills for the expenses of the deputy commissioner of labor, and for the services and expenses of the such assistant deputies, shall be audited by the council. For the purpose of inquiring into any violation of the provisions of this act, and enforcing the penalties thereof, such deputy commissioner and assistant may, at all reasonable times, enter any manufacturing or mechanical establishment and make investigation concerning such violations. Such investigation shall be conducted with as little interruption as possible to the prosecution of the business of such establishment. Whoever interferes with such deputy commissioner or his assistants in the performance of their duties as prescribed in this act shall be fined fifty dollars.

SEC. 10. Nothing in this act shall apply to any manufacturing establishment of business the materials and product of which are perishable, and require immediate labor thereon to prevent decay thereof or damage thereto.

RHODE ISLAND.

STAIRWAYS, FIRE-ESCAPES, ETC.

SECTION 1. The town councils of towns and the city councils of cities, respectively, shall pass such ordinances and make all needful rules and regulations in reference to the construction and location of stairways, and the providing and putting up of fire-escapes upon buildings within the limits of their respective towns or cities, as they may deem to be necessary and proper for the protection of the persons and lives of persons frequenting or being in said buildings, and to provide for the punishment of the person or corporation who may violate such ordinances, rules or regulations, by fine not exceeding ten dollars per day for every day the said ordinances, rules or regulations may be violated.

SEC. 2. The town councils of towns and the city councils of cities, respectively, shall pass ordinances and adopt rules and regulations for the construction, location and operation of elevators and hoistways and the approaches thereto used for the carriage of persons or of merchandise within the limits of their respective towns or cities, and shall provide for the punishment of the persons committing a violation thereof by a fine not exceeding five dollars per day for each day such violation shall continue.

SEC. 3. The town councils of towns and the city councils of cities shall, respectively, designate such town or city officer as they may deem expedient to see that all ordinances, rules and regulations made under the provisions of this act are faithfully executed within the limits of their respective towns or cities, and may provide such compensation for such officer as they shall deem proper.

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